

# 2008 Epidemiologic Profiles of HIV, STD, and Hepatitis in Missouri



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## Background

The Division of HIV/AIDS Prevention at the Centers for Disease Control and Prevention (CDC) and the Health Resources and Services Administration (HRSA) released the *Integrated Guidelines for Developing Epidemiologic Profiles* in 2004. These guidelines are meant to assist states in creating standardized profiles that meet the planning needs of HIV prevention and care programs, while allowing freedom to portray unique situations within the state. The epidemiologic profile is divided into two sections, within which five questions are addressed.

### **Profile Organization:**

#### **Section 1: Core Epidemiological Questions**

This section deals with understanding the characteristics of the general population, the distribution of HIV disease and sexually transmitted diseases (STDs) in the state, and a description of the population at risk for HIV and STD infection. This section is organized around three key questions:

**Question 1: What are the sociodemographic characteristics of the general population of Missouri?**

Describes the overall demographic and socioeconomic characteristics of the general population of Missouri.

**Question 2: What is the scope of the HIV/AIDS epidemic in Missouri?**

Describes the impact of the HIV/AIDS epidemic in Missouri.

**Question 3: What are the indicators of HIV/AIDS infection risk in Missouri?**

Provides an analysis of the high-risk populations. Both the direct and indirect measures of risk behaviors associated with HIV transmission and the indicators of high-risk behaviors are described in this section.

#### **Section 2: Ryan White HIV/AIDS Care Act Special Questions and Considerations**

This section focuses on the questions that pertain to the HRSA HIV/AIDS care planning groups. It describes access to, utilization of, and standards of care among persons in Missouri who are HIV infected. It is organized around two key questions:

**Question 4: What are the HIV service utilization patterns of individuals with HIV disease in Missouri?**

Characterizes patterns in the use of services by the population living with HIV/AIDS in Missouri.

**Question 5: What are the number and characteristics of the individuals who know they are HIV positive but who are not in care?**

Assesses the unmet need of persons who know they are HIV positive, but are not in care. Describes their service needs and perception of care.

### **General Information:**

The 2008 *Profiles* is intended to provide an updated summary of the epidemiology of HIV, STDs, hepatitis, and unmet primary medical care needs among individuals living with HIV through 2008. Please refer to the data sources used in the *Profiles* on page ii and the technical notes on page iii to develop a better understanding for interpreting the data presented. Additional sections of the profile are dedicated to providing data specific to each of the six HIV planning regions to assist with regional level planning efforts.

### **Missouri Planning Cycle:**

The statewide Missouri Community Planning Group (CPG) operates on a five year planning cycle. The current prevention plan runs from 2006-2010. In 2010, a new comprehensive HIV prevention plan will be developed for 2011-2015. To best serve the CPG planning process, updates to the epidemiologic profile are designed to coincide with the CPG's planning cycle. As a result, a complete update of all five questions of the epidemiologic profile is completed every five years, coinciding with the development of the new comprehensive HIV prevention plan. In the other years, updates will only be made to selected questions of the profile. The current *Profiles* represents a comprehensive update to question 2 (What is the scope of the HIV/AIDS epidemic in Missouri?), a selective update to question 3 (What are the indicators of HIV/AIDS infection risk in Missouri?) of STD and hepatitis data, and a selective update to question 5 (What are the number and characteristics of the individuals who know they are HIV positive but who are not in care?). For data from the most recently completed comprehensive *Profiles*, please refer to the 2004 *Epidemiologic Profile*, which can be accessed at [http://www.dhss.mo.gov/HIV\\_STD\\_AIDS/2004EpidemiologicProfile.pdf](http://www.dhss.mo.gov/HIV_STD_AIDS/2004EpidemiologicProfile.pdf).

## **Data Sources**

### **HIV/AIDS Surveillance Data, eHARS**

Missouri's communicable disease reporting rule, 19 CSR 20-20.020 established reporting of AIDS cases in 1983, named HIV cases in 1987, CD4 lymphocyte counts in 1991, and HIV viral load lab results in 2000. Demographic information, vital status, mode of exposure, laboratory results, and treatment and service referrals are collected on standardized case report forms and laboratory reports. The Missouri Department of Health and Senior Services (MDHSS), Bureau of HIV, STD, and Hepatitis (BHSB) is responsible for managing the HIV/AIDS surveillance data, stored in the evaluation HIV/AIDS Reporting System (eHARS). Evaluations have shown a high level of completeness of the surveillance system. However, the surveillance system primarily collects information only on individuals diagnosed with HIV disease in Missouri. Some information regarding those currently living with HIV in Missouri is maintained in eHARS, but is not complete. Therefore, the *Profiles* only includes data on those whose most recent diagnosis (HIV or AIDS) occurred in Missouri. The data collected in the surveillance system is based on diagnosis date, and not the time of infection. The diagnosis can be made at any clinical stage of the disease. The characteristics associated with new diagnoses may not reflect characteristics associated with recent infection. The surveillance system only includes data on individuals that are tested confidentially and reported. Members of certain subpopulations may be more or less likely to be tested, and therefore different subpopulations could be over- or under-represented among diagnosed and reported HIV cases.

### **HIV Case Management Data, FACTORS**

MDHSS participates in a cooperative agreement with Health Resources and Service Administration (HRSA) for the provision of several programs funded by the Ryan White HIV Treatment Modernization Act. Data for persons served by these programs are collected and stored in the FACTORS database. Data include key demographic and eligibility related variables for persons residing in Missouri, and portions of Illinois and Kansas. These data are used to monitor the level of need and the provision of services for case management enrolled individuals.

### **Hepatitis Surveillance Data, Missouri Health Surveillance Information Systems, MOHSIS**

Missouri's communicable disease reporting rule, 19 CSR 20-20.020 requires reporting of acute and chronic hepatitis B and C cases, and prenatal hepatitis B within three days to the local health authority or MDHSS. Demographic information, vital status, laboratory results, and treatment information are collected on standardized report forms and laboratory reports. MDHSS BHSB is responsible for managing the hepatitis surveillance data, stored in the Missouri Health Surveillance Information Systems (MOHSIS). Limitations of the data include incomplete race/ethnicity information and underreporting.

### **Population Estimates, Missouri Department of Health, Bureau of Health Informatics**

MDHSS maintains population files for Missouri and its counties based on data provided by the U.S. Census Bureau in partnership with the Federal State Cooperative Program for Population Estimates. Census counts are produced every ten years, with the 2000 census representing the most recent census. Population estimates are produced for non-census year based on adjustments made to the most recent census counts. Due to the time required to compute these estimates, the most recent year's estimates are not available for use in the *Profiles*, and the previous year's population estimates are used instead.

### **STD Surveillance Data, STD\*MIS**

Missouri's communicable disease reporting rule, 19 CSR 20-20.020 requires reporting of chlamydia and gonorrhea cases within three days, and syphilis, including congenital syphilis, within one day to the local health authority or MDHSS. Demographic information, vital status, laboratory results, and treatment information are collected on standardized report forms and laboratory reports. The MDHSS BHSB is responsible for managing all reportable STD surveillance data, stored in the STD Management Information System (STD\*MIS) database. Data in this system are presented based on the date of report to the health department and not the diagnosis date. The data represent only those individuals tested and reported, which underestimates the true burden of infection as many infected individuals do not seek care, often due to a lack of symptoms. In addition, many people receive treatment without being tested, again underestimating the true burden of infection. Since morbidity is frequently entered based on the receipt of laboratory reports at MDHSS, race and ethnicity information is often not available. Incomplete race and ethnicity reporting limits the interpretation of trends for these characteristics.

## Technical Notes

**HIV Disease, HIV case, AIDS case:** HIV disease includes all individuals diagnosed with the HIV virus regardless of the stage of disease progression. All persons with HIV disease can be sub-classified as either an AIDS case (if they are in the later stages of the disease process and have met the case definition for AIDS), or an HIV case (if they are in the earlier stages of the disease process and have not met the AIDS case definition). In this report, the sub-classification of HIV or AIDS is based on an individual's status of disease progression as of December 31, 2008.

**Date of Diagnosis:** Represents the date an individual was first diagnosed with the HIV virus, regardless of the stage of disease progression. However, in many instances the initial diagnosis of infection does not occur until several years after the initial infection, so at best the trends in reported HIV cases can only approximate actual trends in new HIV infections.

**Reporting Delay:** Delays exist between the time HIV infection is diagnosed and the time the infection is reported to MDHSS. As a result of reporting delays, case numbers for the most recent years of diagnosis may not be complete. Data from recent years should be considered provisional. The data presented in this report have not been adjusted for reporting delay. The data in this report represent all information reported to MDHSS through February 25, 2009.

**Place of Residence:** Data are presented based on an individual's residence at time of most recent diagnosis of HIV or AIDS. Only cases whose most recent diagnosis was Missouri are included in the analyses presented in the *Profiles*. This may or may not correspond with the individual's residence at the time of initial infection, or to the current residence.

**Vital Status:** Cases are presumed to be alive unless MDHSS has received notification of death. Current vital status information for cases is ascertained through routine matches with Missouri death certificates, reports of death from other states' surveillance programs, and routine site visits with major reporting sites.

**Exposure Category:** Despite possible existence of multiple methods through which HIV can be transmitted, cases are assigned a single most likely exposure category based on a hierarchy developed by the CDC. A limitation of the dataset is the large number of cases reported with an undetermined exposure category. Data on cases with missing exposure category information has been proportionately re-distributed into known exposure categories in selected analyses.

**Routine Interstate Duplicate Review (RIDR):** The mobility of American citizens impacts the ability to accurately track individuals living with HIV/AIDS. Mobility may result in the same HIV infected person being counted in two or more different states. To help respond to potential duplication problems, the CDC initiated the Interstate Duplication Evaluation Project (IDEP), now called Routine Interstate Duplicate Review (RIDR) in 2002. RIDR compares patient records throughout the nation in order to identify duplicate cases. The states with duplicate cases contact one another to compare patient profiles in order to determine the state to which the case belongs, based on residence during the earliest date of diagnosis. Because of this process, the cumulative number of cases within Missouri may change, but the process has increased the accuracy of Missouri's data by reducing the chance that a case has been counted more than once nationally.

**Small Numbers:** Data release limitations are set to ensure that the information cannot be used to inadvertently identify an individual. It is difficult to make meaningful statements concerning trends in areas with low numbers of cases. Please interpret rates where the numerator is less than 20 cases with caution because of the low reliability of rates based on a small number of cases.

**Glossary of Terms:** A glossary of terms is located at the end of the profile. If the reader is unclear about any terms used in the *Profiles*, please feel free to contact MDHSS BSHS for additional information.

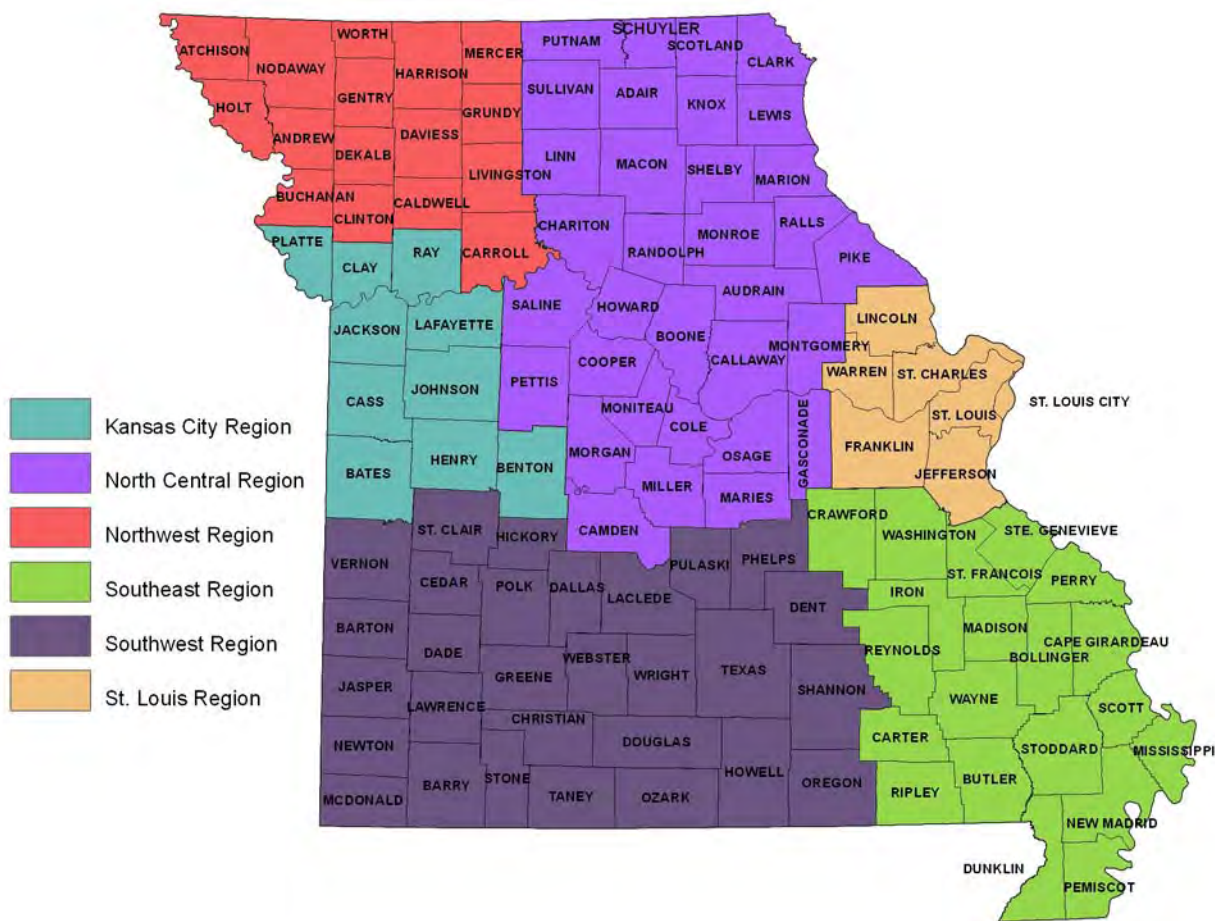
**Race/Ethnicity:** Race and ethnicity information has been collected under two different systems in the HIV/AIDS reporting system. Since many cases were reported under the old classification system, the use of the race and ethnicity categories from the old classification system will be maintained in this report. All cases identified with a Hispanic ethnicity will be reported in the *Profiles* as Hispanic, regardless of reported race information. In the text of this document, whenever cases are being discussed, the term "White" means White, not Hispanic, and "Black" means Black, not Hispanic. The number of cases reported as "not Hispanic" may include individuals whose ethnicity was not reported. Individuals who reported multiple racial categories or whose race was unknown are included in the category "Other/Unknown".

## Epi Profiles Summary: Introduction

**Diagnoses in Correctional Facilities:** For persons living in Missouri correctional facilities (which include state, county, and local facilities) at the time of their HIV/AIDS, chlamydia or gonorrhea diagnosis, the location of the correctional facility is considered the individual's residence at diagnosis. For persons living in Missouri correctional facilities at the time of their syphilis diagnosis, the residence at diagnosis is considered the individual's address prior to being incarcerated. Data for persons diagnosed in Missouri correctional facilities are included in the statewide data, since most of these individuals were likely Missouri residents prior to incarceration. However, diagnoses in Missouri correctional facilities are not included in the HIV/AIDS data for the six HIV regions of the state. This is based on the fact that these individuals, especially those in the state prison system, are often incarcerated in a different location than where they were residing (and were likely infected) prior to imprisonment. If included among the cases from the area where imprisoned at the time of diagnosis, it would distort the picture of the epidemic in that area. Individuals diagnosed at federal correctional facilities in Missouri are not included in any data presented.

Anonymous Testing: The data do not include cases of HIV infection reported or diagnosed in persons anonymously tested at the state's four anonymous testing sites in St. Louis City, Kansas City, Springfield, and Columbia.

**Geographic Area vs. HIV Region:** When data are presented by geographic area, the St. Louis City represents individuals diagnosed in the St. Louis City limits. St. Louis County represents individuals diagnosed in St. Louis County. Kansas City represents individuals diagnosed in the Kansas City limits. Outstate represents individuals diagnosed in all other areas. Refer to the map below for the counties included when data are presented by HIV region.



## **Abbreviations**

AIDS=Acquired Immunodeficiency Syndrome

BHSH=Bureau of HIV, STD, and Hepatitis

CDC=Centers for Disease Control and Prevention

CPG=Community Planning Group

eHARS=evaluation HIV/AIDS Reporting System

HIV=Human Immunodeficiency Virus

IDEP=Interstate Duplicate Evaluation Project

IDU=Injection drug use

HRSA=Health Resources and Services Administration

MDHSS=Missouri Department of Health and Senior Services

MSM=Men who have sex with men

MSM/IDU=Men who have sex with men and inject drugs

MOHSIS=Missouri Health Surveillance Information Systems

NIR=No indicated risk

P&S=Primary and secondary

RIDR=Routine Interstate Duplicate Review

STD=Sexually Transmitted Disease

STD\*MIS=Sexually Transmitted Disease Management Information System



# MISSOURI STATE SUMMARY

Population Estimates, by HIV Region, Missouri, 2007							
	St. Louis Region	Kansas City Region	Northwest Region	North Central Region	Southwest Region	Southeast Region	Missouri Total
<b>Sex</b>							
Male	1,007,557	598,787	120,644	365,437	539,008	239,589	2,871,022
Female	1,080,388	628,058	121,136	372,508	557,750	247,553	3,007,393
Total	2,087,945	1,226,845	241,780	737,945	1,096,758	487,142	5,878,415
<b>Race/Ethnicity</b>							
White	1,572,428	951,956	226,477	668,014	1,016,638	445,861	4,881,374
Black	415,286	177,027	7,882	41,256	21,689	29,378	692,518
Hispanic	44,103	70,380	4,980	16,459	35,592	6,907	178,421
Asian	49,999	20,908	1,452	9,186	11,284	2,535	95,364
American Indian	6,129	6,574	989	3,030	11,555	2,461	30,738
Other/Unknown	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	2,087,945	1,226,845	241,780	737,945	1,096,758	487,142	5,878,415
<b>Race/Ethnicity-Males</b>							
White Male	768,078	466,079	111,738	328,003	496,864	218,437	2,389,199
Black Male	189,415	82,367	5,024	22,292	11,915	14,823	325,836
Hispanic Male	22,963	36,955	2,645	8,888	18,867	3,785	94,103
Asian Male	24,126	10,095	714	4,681	5,540	1,253	46,409
American Indian Male	2,975	3,291	523	1,573	5,822	1,291	15,475
Other/Unknown Male	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	1,007,557	598,787	120,644	365,437	539,008	239,589	2,871,022
<b>Race/Ethnicity-Females</b>							
White Female	804,350	485,877	114,739	340,011	519,774	227,424	2,492,175
Black Female	225,871	94,660	2,858	18,964	9,774	14,555	366,682
Hispanic Female	21,140	33,425	2,335	7,571	16,725	3,122	84,318
Asian Female	25,873	10,813	738	4,505	5,744	1,282	48,955
American Indian Female	3,154	3,283	466	1,457	5,733	1,170	15,263
Other/Unknown Female	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	1,080,388	628,058	121,136	372,508	557,750	247,553	3,007,393
<b>Age</b>							
<2	55,652	36,680	6,149	19,107	29,858	12,951	160,397
2-12	301,169	186,065	32,071	100,948	158,318	68,414	846,985
13-18	184,142	103,016	19,623	59,842	89,945	39,955	496,523
19-24	163,255	89,270	21,789	73,910	94,804	36,269	479,297
25-44	550,971	344,325	62,818	195,947	295,710	131,056	1,580,827
45-64	571,122	319,159	60,920	183,602	267,829	123,383	1,526,015
65+	261,634	148,330	38,410	104,589	160,294	75,114	788,371
Total	2,087,945	1,226,845	241,780	737,945	1,096,758	487,142	5,878,415

## Key Highlights: What is the scope of the HIV/AIDS epidemic in Missouri?

### **Magnitude of the Problem and General Trends**

- From 1982 to 2008, there have been a total of 16,892 persons diagnosed with HIV disease in Missouri and reported to MDHSS. Of these individuals, 11,568 (68%) were subcategorized as AIDS cases, and the remaining 5,324 (32%) were subcategorized as HIV cases. Of the cumulative number of persons diagnosed with HIV disease, 10,834 (64%) were presumed to be living at the end of 2008.
- The annual number of persons newly diagnosed with HIV disease fluctuated between 1999 and 2008. In general, the number of new diagnoses reported each year from 2004 to 2008 was higher than the number reported between 1999 and 2003. In 2008, there were 588 persons newly diagnosed with HIV. However, this value has not been adjusted for reporting delays, and therefore is likely to increase.
- The number of persons living with HIV disease continued to increase every year, from 7,148 persons in 1999 to 10,834 persons in 2008. The increase is primarily due to the fact that individuals are living longer with the disease as a result of improved treatment and medical care.

### **Where**

- HIV disease disproportionately impacts the state's two major metropolitan areas (St. Louis and Kansas City). The highest rates of new diagnoses and persons living with HIV disease, as well as the largest numbers of cases, were found in these two areas.
- The rate of persons newly diagnosed who remained classified as HIV cases at the end of 2008 was highest in St. Louis City (31.1 per 100,000). The second highest rate was in Kansas City (18.7 per 100,000), followed by St. Louis County (8.9 per 100,000). The rate of persons newly diagnosed who were classified as AIDS cases at the end of 2008 was highest in Kansas City (12.4 per 100,000), and second highest in St. Louis City (11.1 per 100,000). St. Louis City also had the highest rate of individuals living with HIV disease.

### **Who**

#### **Sex**

- Males represented the majority of persons newly diagnosed (82%) and living with (83%) HIV disease. The disproportionate impact of HIV disease on males has decreased over time. The rate of persons living with HIV disease was 5.3 times greater among males than females. Whereas the rate of new diagnoses in 2008 was only 4.6 times greater among males than females.

#### **Race/Ethnicity**

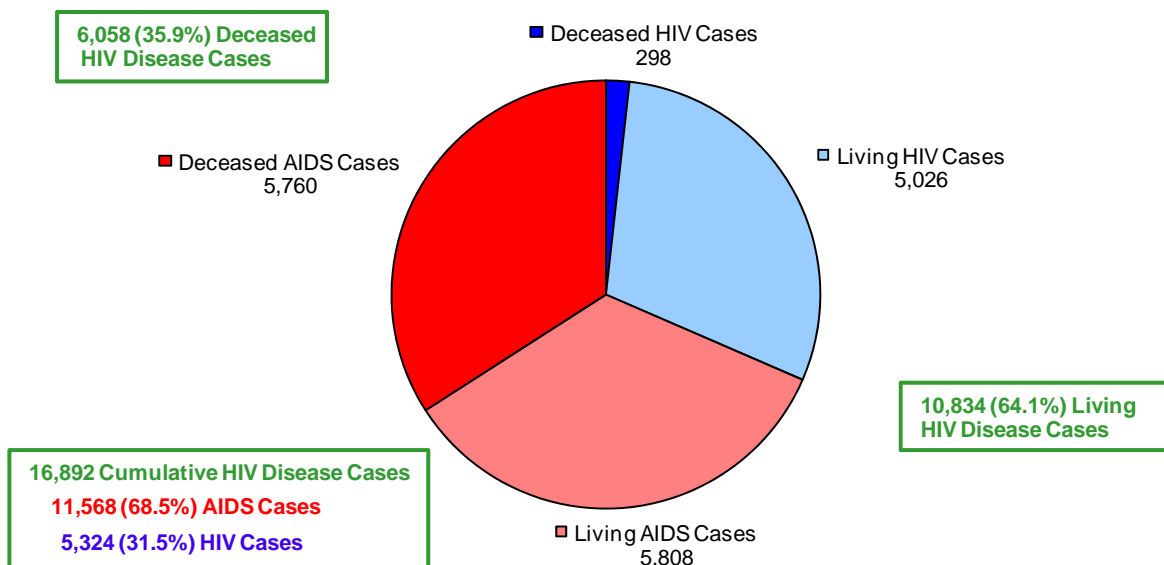
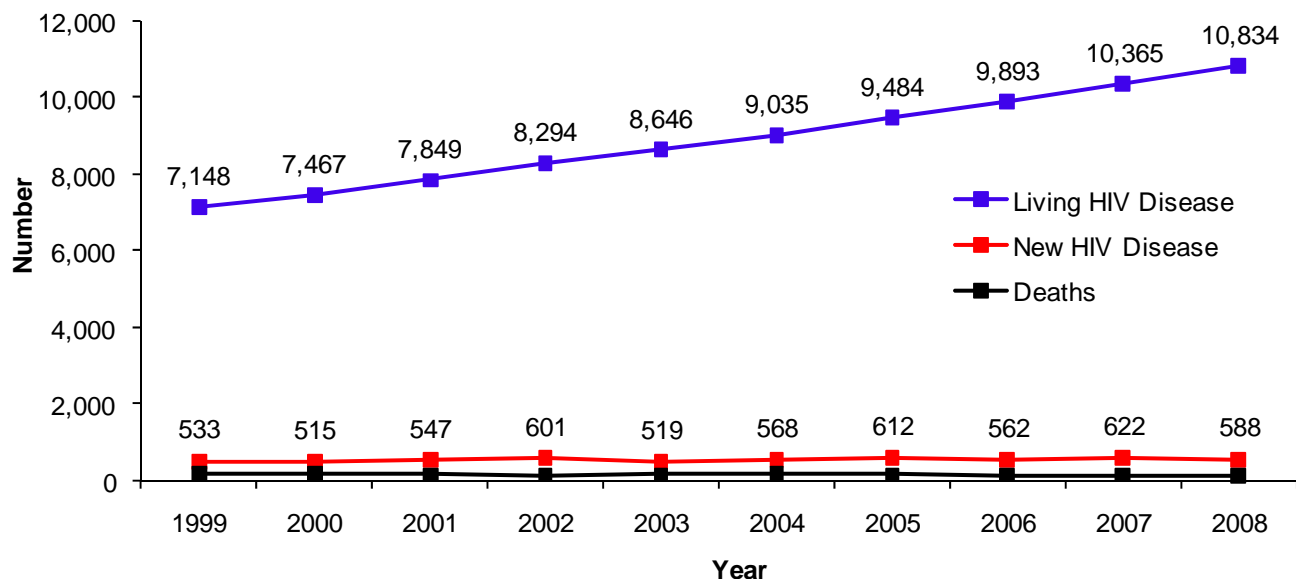
- HIV disease continues to disproportionately impact minorities. The rate of newly diagnosed HIV disease cases was 8.2 times greater among blacks than whites, and 2.9 times greater among Hispanics than whites. The disparity was even greater among black females. While black females represented only 12% of Missouri's female population, black females accounted for 69% of new female HIV diagnoses. It should be emphasized that race/ethnicity in itself is not a risk factor for HIV infection; however, among many racial/ethnic minority populations, social, economic, and cultural factors are associated with high rates of HIV risk behavior. These factors also may be barriers to receiving HIV prevention information or accessing HIV testing, diagnosis, and treatment.

#### **Age**

- The age of individuals living with HIV disease has increased over time. In 1999, the largest numbers of persons living with HIV disease were 35-39 years of age, whereas in 2008 persons 45-49 years old represented the largest number of living cases.
- Although the age of persons living with the disease has increased over time, the age of new diagnoses has decreased. In 2008, the largest numbers of persons newly diagnosed with HIV disease were between 19-24 years of age, compared to 1999 when the largest numbers of new diagnoses were 35-39 years of age. The differences may be attributed to increased testing among younger individuals or due to a true increase the number of new infections.

#### **Exposure Category**

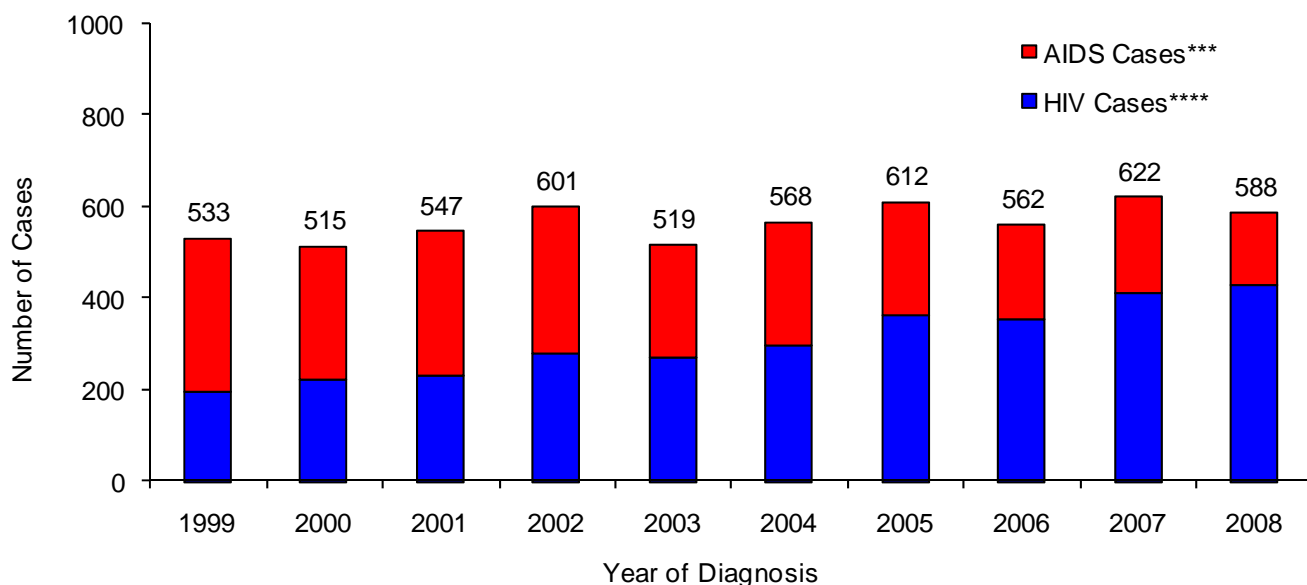
- The majority of new diagnoses continue to be attributed to men who have sex with men. Among females, heterosexual contact was the primary mode of transmission. In 2008, there were 3 persons newly diagnosed who acquired their infection through perinatal transmission.

**Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Missouri, 1982—2008****Figure 2. Living and new HIV disease cases and deaths by year\*, Missouri, 1999—2008**

\*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year; For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2008, there have been a total of 16,892 HIV disease cases diagnosed in Missouri and reported to MDHSS (Figure 1). Of the cumulative cases reported, 64% were still presumed to be living with HIV disease at the end of 2008. Among those living with HIV disease, 5,026 were classified as HIV cases at the end of 2008 and 5,808 were classified as AIDS cases.

At the end of 2008, there were 10,834 persons living with HIV disease whose most recent diagnosis occurred in Missouri (Figure 2). The number of people living with HIV disease increased each year. There were 588 new HIV disease diagnoses in 2008. The number of new diagnoses from 2004 to 2008 has remained generally stable. The number of deaths among persons with HIV disease each year has remained generally steady. The lower number of deaths in 2008 was likely due to delays in death reporting.

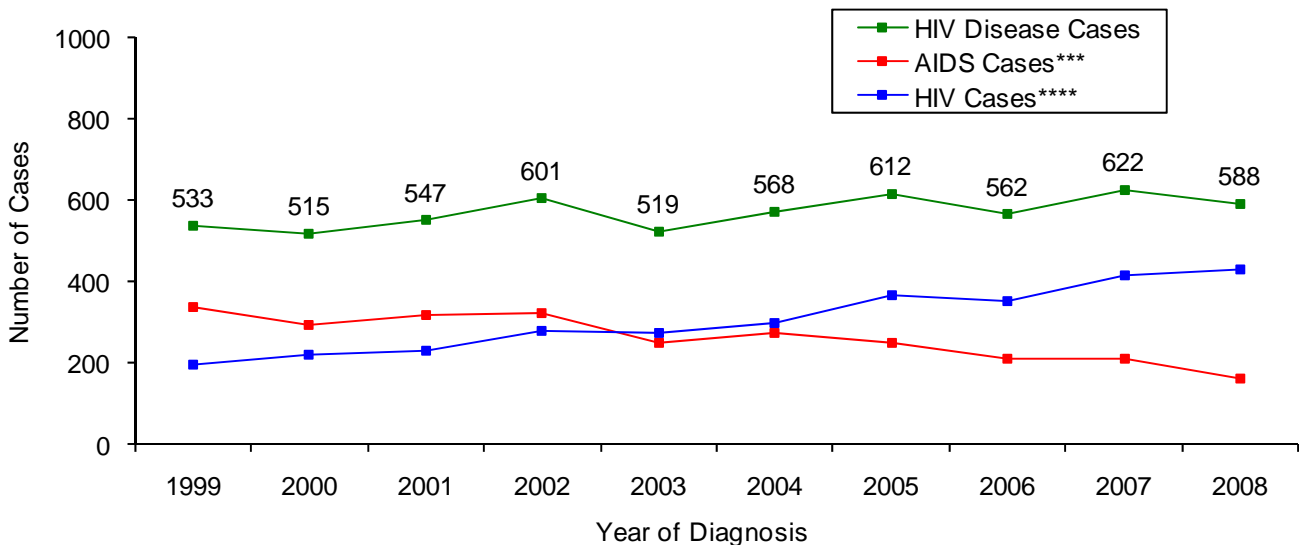
**Figure 3. HIV disease cases, by current status\* and year of diagnosis\*\*, Missouri, 1999—2008**

\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

**Figure 4. Reported HIV disease cases, by current status\* and year of diagnosis\*\*, Missouri, 1999—2008**

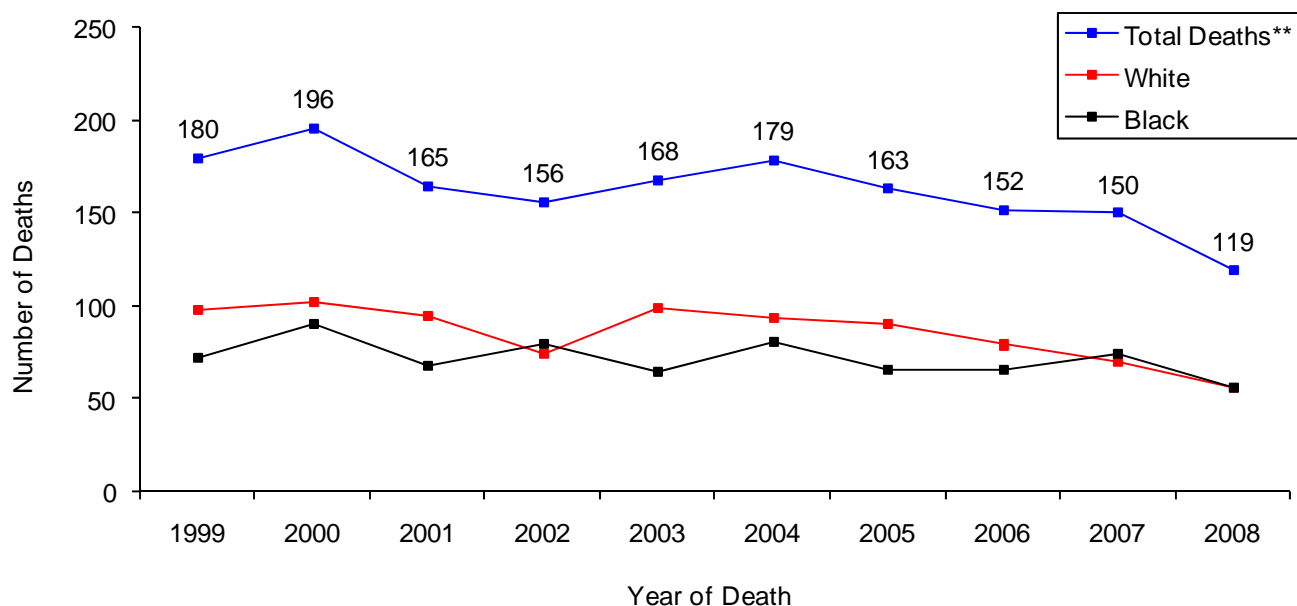
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

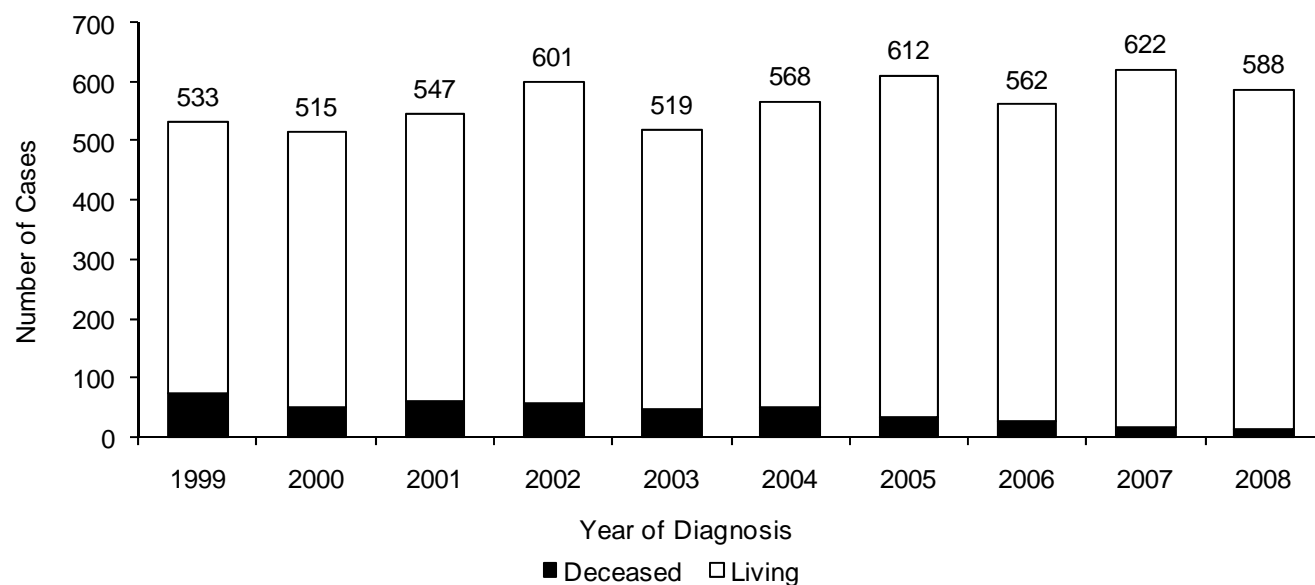
Between 1999 and 2008, the number of new HIV disease diagnoses has ranged from 515 cases in 2000, to 622 cases in 2007 (Figures 3 and 4). The number of new diagnoses from 2004 to 2008 was generally higher than from 1999 to 2003. However, from 2004 to 2008 the number of new diagnoses has been generally stable. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time. For those diagnosed with HIV disease in 1999, a larger number are currently classified as AIDS cases compared to those diagnosed in 2008 because they have been living with the virus longer.

**Figure 5. HIV disease deaths\*, by selected race\*\*, by year of death, Missouri, 1999—2008**

\*Includes deaths that have occurred among those diagnosed with HIV disease in Missouri.

\*\*Total deaths include persons of all races.

†Only includes deaths through December 31, 2008, and reported by February 25, 2009.

**Figure 6. Persons diagnosed with HIV disease by current vital status\* and year of diagnosis\*\*, Missouri, 1999—2008**

\*Vital status on December 31, 2008.

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

The number of deaths among persons with HIV disease has remained relatively stable, although a decrease in the number of deaths occurred from 2004-2008 (Figure 5). The lower number of deaths in 2008 was likely due to delays in death reporting. The general decrease in the number of deaths over time is likely related to the use of highly active antiretroviral therapy (HAART).

Of the 533 persons diagnosed with HIV disease in 1999, 73 (14%) were deceased by the end of 2008 (Figure 6). Among the 588 cases first diagnosed in 2008, 12 (2%) were deceased at the end of 2008. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

**Table 1. Living<sup>†</sup> HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Missouri, 2008**

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
<b>Sex</b>									
Male	4,100	81.6%	142.8	4,942	85.1%	172.1	9,042	83.5%	314.9
Female	926	18.4%	30.8	866	14.9%	28.8	1,792	16.5%	59.6
Total	5,026	100.0%	85.5	5,808	100.0%	98.8	10,834	100.0%	184.3
<b>Race/Ethnicity</b>									
White	2,528	50.3%	51.8	3,085	53.1%	63.2	5,613	51.8%	115.0
Black	2,238	44.5%	323.2	2,476	42.6%	357.5	4,714	43.5%	680.7
Hispanic	183	3.6%	102.6	193	3.3%	108.2	376	3.5%	210.7
Asian	28	0.6%	29.4	17	0.3%	17.8	45	0.4%	47.2
American Indian	6	0.1%	19.5	17	0.3%	55.3	23	0.2%	74.8
Other/Unknown	43	0.9%	N/A	20	0.3%	N/A	63	0.6%	N/A
Total	5,026	100.0%	85.5	5,808	100.0%	98.8	10,834	100.0%	184.3
<b>Race/Ethnicity-Males</b>									
White Male	2,198	53.6%	92.0	2,801	56.7%	117.2	4,999	55.3%	209.2
Black Male	1,691	41.2%	519.0	1,928	39.0%	591.7	3,619	40.0%	1110.7
Hispanic Male	150	3.7%	159.4	168	3.4%	178.5	318	3.5%	337.9
Asian Male	22	0.5%	47.4	12	0.2%	25.9	34	0.4%	73.3
American Indian Male	6	0.1%	38.8	16	0.3%	103.4	22	0.2%	142.2
Other/Unknown Male	33	0.8%	N/A	17	0.3%	N/A	50	0.6%	N/A
Total	4,100	100.0%	142.8	4,942	100.0%	172.1	9,042	100.0%	314.9
<b>Race/Ethnicity-Females</b>									
White Female	330	35.6%	13.2	284	32.8%	11.4	614	34.3%	24.6
Black Female	547	59.1%	149.2	548	63.3%	149.4	1,095	61.1%	298.6
Hispanic Female	33	3.6%	39.1	25	2.9%	29.6	58	3.2%	68.8
Asian Female	6	0.6%	12.3	5	0.6%	10.2	11	0.6%	22.5
American Indian Female	0	0.0%	0.0	1	0.1%	6.6	1	0.1%	6.6
Other/Unknown Female	10	1.1%	N/A	3	0.3%	N/A	13	0.7%	N/A
Total	926	100.0%	30.8	866	100.0%	28.8	1,792	100.0%	59.6
<b>Current Age<sup>‡</sup></b>									
<2	5	0.1%	3.1	0	0.0%	0.0	5	0.0%	3.1
2-12	30	0.6%	3.5	3	0.1%	0.4	33	0.3%	3.9
13-18	44	0.9%	8.9	19	0.3%	3.8	63	0.6%	12.7
19-24	310	6.2%	64.7	89	1.5%	18.6	399	3.7%	83.2
25-44	2,655	52.8%	168.0	2,488	42.8%	157.4	5,143	47.5%	325.3
45-64	1,849	36.8%	121.2	2,990	51.5%	195.9	4,839	44.7%	317.1
65+	133	2.6%	16.9	219	3.8%	27.8	352	3.2%	44.6
Total	5,026	100.0%	85.5	5,808	100.0%	98.8	10,834	100.0%	184.3

<sup>†</sup>Includes persons diagnosed with HIV disease in Missouri who are currently living, regardless of current residence. Includes persons diagnosed in Missouri correctional facilities.

\*Cases which remained HIV cases at the end of 2008.

\*\*Cases classified as AIDS by December 31, 2008.

\*\*\*The sum of HIV cases and AIDS cases.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

<sup>‡</sup>Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

**Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Missouri, 2008**

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
<b>Sex</b>									
Male	352	82.1%	12.3	128	80.5%	4.5	480	81.6%	16.7
Female	77	17.9%	2.6	31	19.5%	1.0	108	18.4%	3.6
Total	429	100.0%	7.3	159	100.0%	2.7	588	100.0%	10.0
<b>Race/Ethnicity</b>									
White	191	44.5%	3.9	65	40.9%	1.3	256	43.5%	5.2
Black	212	49.4%	30.6	83	52.2%	12.0	295	50.2%	42.6
Hispanic	19	4.4%	10.6	8	5.0%	4.5	27	4.6%	15.1
Asian	4	0.9%	4.2	1	0.6%	1.0	5	0.9%	5.2
American Indian	0	0.0%	0.0	1	0.6%	3.3	1	0.2%	3.3
Other/Unknown	3	0.7%	N/A	1	0.6%	N/A	4	0.7%	N/A
Total	429	100.0%	7.3	159	100.0%	2.7	588	100.0%	10.0
<b>Race/Ethnicity-Males</b>									
White Male	170	48.3%	7.1	56	43.8%	2.3	226	47.1%	9.5
Black Male	159	45.2%	48.8	62	48.4%	19.0	221	46.0%	67.8
Hispanic Male	18	5.1%	19.1	7	5.5%	7.4	25	5.2%	26.6
Asian Male	4	1.1%	8.6	1	0.8%	2.2	5	1.0%	10.8
American Indian Male	0	0.0%	0.0	1	0.8%	6.5	1	0.2%	6.5
Other/Unknown Male	1	0.3%	N/A	1	0.8%	N/A	2	0.4%	N/A
Total	352	100.0%	12.3	128	100.0%	4.5	480	100.0%	16.7
<b>Race/Ethnicity-Females</b>									
White Female	21	27.3%	0.8	9	29.0%	0.4	30	27.8%	1.2
Black Female	53	68.8%	14.5	21	67.7%	5.7	74	68.5%	20.2
Hispanic Female	1	1.3%	1.2	1	3.2%	1.2	2	1.9%	2.4
Asian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	2	2.6%	N/A	0	0.0%	N/A	2	1.9%	N/A
Total	77	100.0%	2.6	31	100.0%	1.0	108	100.0%	3.6
<b>Current Age<sup>†</sup></b>									
<2	3	0.7%	1.9	0	0.0%	0.0	3	0.5%	1.9
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	14	3.3%	2.8	1	0.6%	0.2	15	2.6%	3.0
19-24	99	23.1%	20.7	21	13.2%	4.4	120	20.4%	25.0
25-44	227	52.9%	14.4	88	55.3%	5.6	315	53.6%	19.9
45-64	85	19.8%	5.6	45	28.3%	2.9	130	22.1%	8.5
65+	1	0.2%	0.1	4	2.5%	0.5	5	0.9%	0.6
Total	429	100.0%	7.3	159	100.0%	2.7	588	100.0%	10.0

\*HIV cases diagnosed during 2008 which remained HIV cases at the end of the year. Includes persons diagnosed in Missouri correctional facilities.

\*\*AIDS cases initially diagnosed in 2008.

\*\*\*The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2008 with HIV, which progressed to AIDS in 2008.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

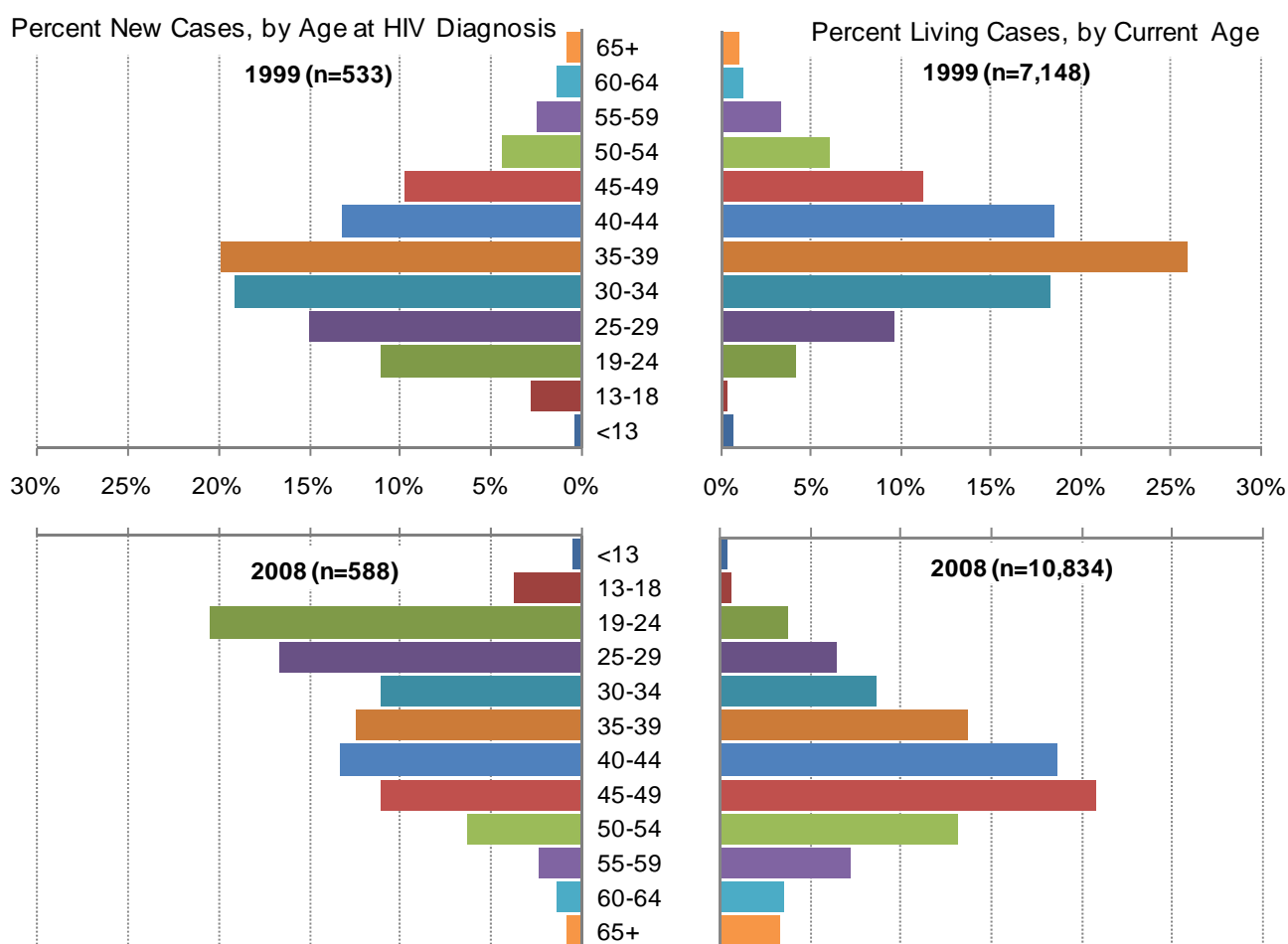
†Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

Of the 10,834 persons living with HIV at the end of 2008, 83% were males (Table 1). The rate of those living with HIV disease was 5.3 times greater among males than females. Although whites represented the largest proportion of living HIV disease cases (52%), the rate of those living with HIV disease was 5.9 times greater among blacks than whites. The rate was 1.8 times greater among Hispanics than whites. Among males, the rate of living cases was 5.3 times greater for blacks than whites, and 1.6 times greater for Hispanics than whites. Among females, the rate of those living with HIV disease was 12.1 times greater among blacks than whites, and 2.8 times greater among Hispanics than whites.

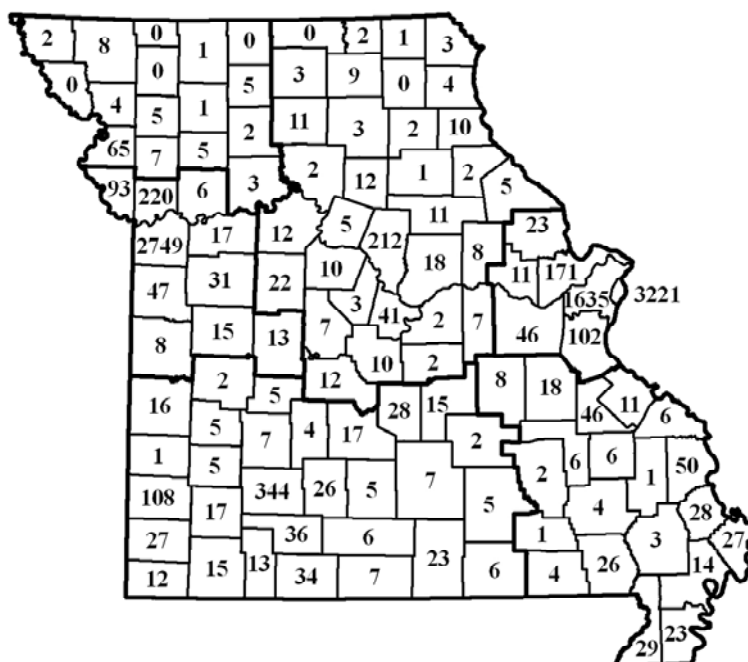
Of the 588 persons newly diagnosed with HIV disease in 2008, 27% were classified as AIDS cases by the end of 2008 (Table 2). The rate of new HIV disease diagnoses was 4.6 times greater among males than females. Females represented a greater proportion of the newly diagnosed AIDS cases (19%) compared to the newly diagnosed HIV cases (18%). A greater proportion of the new AIDS cases occurred among blacks and Hispanics compared to new HIV cases. The rate of new HIV disease cases was 8.2 times greater among blacks than whites, and 2.9 times greater in Hispanics than whites.

**Figure 7. Distribution of new HIV disease cases by age at diagnosis and living HIV disease cases by current age in selected year, Missouri, 1999 and 2008**



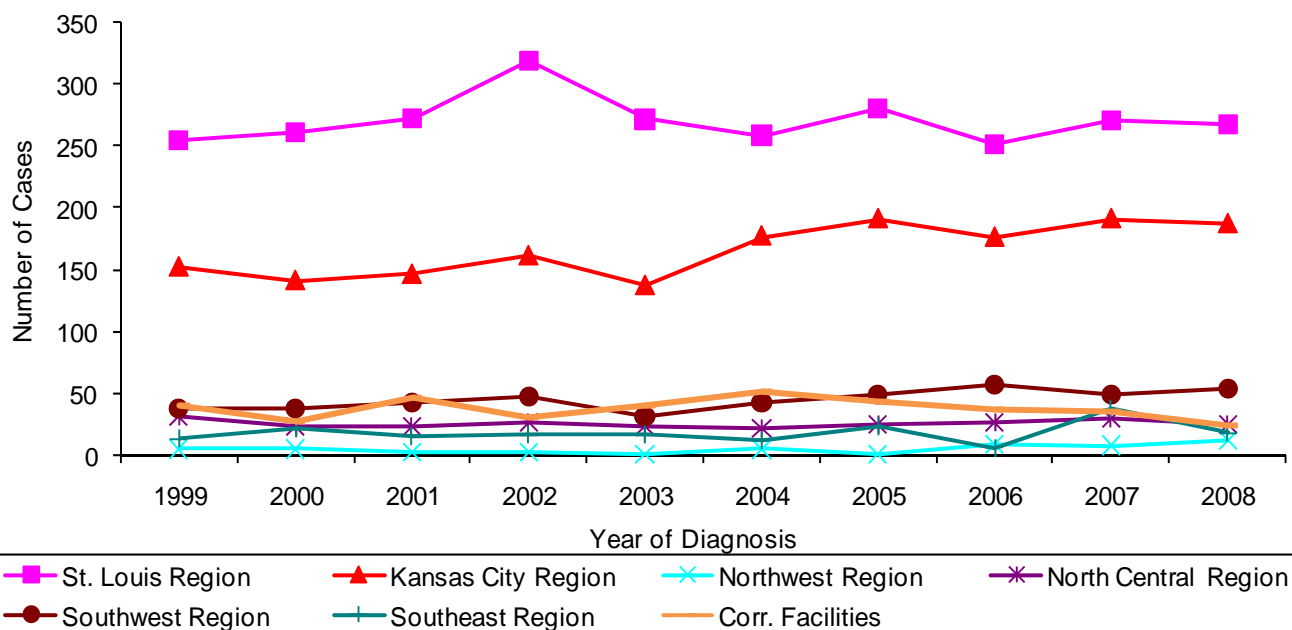
Changes have occurred in the distribution of the age at diagnosis among new HIV disease cases over time (Figure 7). In 1999, the greatest proportion of new diagnoses occurred among those ages 30-34 (19%) and 35-39 (20%). In 2008, the greatest proportion of new diagnoses occurred among those ages 19-24 (20%) and 25-29 (17%). Although the age of new diagnoses has decreased, the age of individuals living with HIV has increased over time. In 1999, the greatest proportion of living cases was between 35-39 years of age (26%). In 2008, the greatest proportion of living cases was between 45-49 years old (21%).

**Figure 8. Number of persons living with HIV disease by county of residence\* and HIV region at time of diagnosis, Missouri, 1982-2008**



\*Based on residence at time of most recent diagnosis of HIV or AIDS. Excludes persons diagnosed in Missouri correctional facilities (n=755).

**Figure 9. Persons diagnosed with HIV disease by HIV region at time of diagnosis, Missouri, 1999-2008**



The largest numbers of persons living with HIV disease in 2008 were most recently diagnosed in St. Louis City (3,221), Jackson County (2,749) and St. Louis County (1,635) (Figure 8). The St. Louis HIV region has represented the largest number of new HIV disease diagnoses in each year from 1999-2008 (Figure 9). The number of new diagnoses has remained fairly steady in all HIV regions with slight fluctuations, except the Kansas City and Southwest HIV regions. The number of new HIV disease diagnoses each year from 2004 to 2008 has been higher than from 1999 to 2003 in the Kansas City and Southwest HIV regions.

**Table 3. New and living HIV and AIDS cases and rates, by geographic area, and by HIV region, Missouri, 2008**

Location	HIV Cases						AIDS Cases					
	Diagnosed 2008*			Living with HIV			Diagnosed 2008**			Living with AIDS		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
<b>Geographic Area</b>												
St. Louis City†	109	25.4%	31.1	1,554	30.9%	443.0	39	24.5%	11.1	1,667	28.7%	475.3
St. Louis County†	89	20.7%	8.9	807	16.1%	81.1	15	9.4%	1.5	828	14.3%	83.2
Kansas City†	84	19.6%	18.7	1,068	21.2%	237.1	56	35.2%	12.4	1,410	24.3%	313.1
Outstate†	127	29.6%	3.1	1,223	24.3%	30.0	45	28.3%	1.1	1,522	26.2%	37.3
Missouri Correctional Facilities††	20	4.7%	N/A	374	7.4%	N/A	4	2.5%	N/A	381	6.6%	N/A
<b>Total</b>	<b>429</b>	<b>100.0%</b>	<b>7.3</b>	<b>5,026</b>	<b>100.0%</b>	<b>85.5</b>	<b>159</b>	<b>100.0%</b>	<b>2.7</b>	<b>5,808</b>	<b>100.0%</b>	<b>98.8</b>
<b>HIV Region</b>												
St. Louis HIV Region†	212	49.4%	10.2	2,527	50.3%	121.0	56	35.2%	2.7	2,682	46.2%	128.5
Kansas City HIV Region†	114	26.6%	9.3	1,336	26.6%	108.9	73	45.9%	6.0	1,863	32.1%	151.9
Northwest HIV Region†	9	2.1%	3.7	44	0.9%	18.2	3	1.9%	1.2	64	1.1%	26.5
North Central HIV Region†	18	4.2%	2.4	201	4.0%	27.2	7	4.4%	0.9	251	4.3%	34.0
Southwest HIV Region†	41	9.6%	3.7	396	7.9%	36.1	13	8.2%	1.2	402	6.9%	36.7
Southeast HIV Region†	15	3.5%	3.1	148	2.9%	30.4	3	1.9%	0.6	165	2.8%	33.9
Missouri Correctional Facilities††	20	4.7%	N/A	374	7.4%	N/A	4	2.5%	N/A	381	6.6%	N/A
<b>MISSOURI</b>	<b>429</b>	<b>100.0%</b>	<b>7.3</b>	<b>5,026</b>	<b>100.0%</b>	<b>85.5</b>	<b>159</b>	<b>100.0%</b>	<b>2.7</b>	<b>5,808</b>	<b>100.0%</b>	<b>98.8</b>

\*HIV cases diagnosed and reported to the Department during 2008 which remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

There were differences in the proportion of persons newly diagnosed with HIV disease that were either concurrently diagnosed with AIDS or progressed to AIDS at the end of 2008 by geographic area and HIV region (Table 3). In Kansas City, 40% of newly diagnosed HIV disease cases progressed to AIDS at the end of 2008. By comparison, the proportion was 26%, 26%, 17%, and 14% for St. Louis City, Outstate, Missouri correctional facilities, and St. Louis County, respectively. Similar trends were also seen among the HIV regions. In the Kansas City HIV region, 39% of newly diagnosed HIV disease cases progressed to AIDS at the end of 2008. Whereas the proportion was 28%, 25%, 24%, 21%, 17%, and 17% for the HIV regions of North Central, Northwest, Southwest, St. Louis, Southeast, and Missouri correctional facilities, respectively. The variation in the proportion of newly diagnosed individuals that progressed to AIDS by the end of 2008 among the geographic areas may be related to differences in when individuals were tested in the course of their disease progression, or differences in active surveillance techniques.

The rates of new HIV cases and living HIV and AIDS cases were greatest in St. Louis City (Table 3). The rate of new AIDS case diagnoses was highest in Kansas City. The rate of new HIV case diagnoses was 10.0 times higher in St. Louis City compared to Outstate, and 6.0 times higher in Kansas City than Outstate. The rate of new AIDS case diagnoses was 11.3 times higher in Kansas City compared to Outstate, and 10.1 times higher in St. Louis City than Outstate. This demonstrates the disproportionate impact of HIV disease on the major metropolitan areas in Missouri.

**Table 4. Diagnosed HIV cases and rates, by selected race/ethnicity, by geographic area, Missouri, 2008**

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases**	%	Rate*
St. Louis City <sup>†</sup>	35	32.1%	22.2	69	63.3%	39.5	3	2.8%	31.9	109	100.0%	31.1
St. Louis County <sup>†</sup>	31	34.8%	4.3	54	60.7%	24.6	4	4.5%	18.7	89	100.0%	8.9
Kansas City <sup>†</sup>	36	42.9%	14.2	42	50.0%	29.8	5	6.0%	11.8	84	100.0%	18.7
Outstate Missouri <sup>†</sup>	82	64.6%	2.2	36	28.3%	22.9	6	4.7%	5.7	127	100.0%	3.1
Missouri Correctional Facilities <sup>††</sup>	7	35.0%	N/A	11	55.0%	N/A	1	5.0%	N/A	20	100.0%	N/A
<b>MISSOURI TOTAL</b>	<b>191</b>	<b>44.5%</b>	<b>3.9</b>	<b>212</b>	<b>49.4%</b>	<b>30.6</b>	<b>19</b>	<b>4.4%</b>	<b>10.6</b>	<b>429</b>	<b>100.0%</b>	<b>7.3</b>

\*Per 100,000 population based on 2007 MDHSS estimates.

\*\*Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Row percentages are shown. Percentages may not total due to rounding.

**Table 5. Diagnosed HIV cases and rates, by selected race/ethnicity, by HIV region, Missouri, 2008**

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases**	%	Rate*
St. Louis HIV Region <sup>†</sup>	75	35.4%	4.8	127	59.9%	30.6	8	3.8%	18.1	212	100.0%	10.2
Kansas City HIV Region <sup>†</sup>	52	45.6%	5.5	54	47.4%	30.5	6	5.3%	8.5	114	100.0%	9.3
Northwest HIV Region <sup>†</sup>	8	88.9%	3.5	1	11.1%	12.7	0	0.0%	0.0	9	100.0%	3.7
North Central HIV Region <sup>†</sup>	10	55.6%	1.5	7	38.9%	17.0	1	5.6%	6.1	18	100.0%	2.4
Southwest HIV Region <sup>†</sup>	28	68.3%	2.8	8	19.5%	36.9	3	7.3%	8.4	41	100.0%	3.7
Southeast HIV Region <sup>†</sup>	11	73.3%	2.5	4	26.7%	13.6	0	0.0%	0.0	15	100.0%	3.1
Missouri Correctional Facilities <sup>††</sup>	7	35.0%	N/A	11	55.0%	N/A	1	5.0%	N/A	20	100.0%	N/A
<b>MISSOURI TOTAL</b>	<b>191</b>	<b>44.5%</b>	<b>3.9</b>	<b>212</b>	<b>49.4%</b>	<b>30.6</b>	<b>19</b>	<b>4.4%</b>	<b>10.6</b>	<b>429</b>	<b>100.0%</b>	<b>7.3</b>

\*Per 100,000 population based on 2007 MDHSS estimates.

\*\*Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Does not include persons diagnosed in Missouri correctional facilities.

††Includes persons diagnosed in Missouri correctional facilities.

Note: Row percentages are shown. Percentages may not total due to rounding.

The proportion of new HIV cases diagnosed in 2008 by race/ethnicity varied by geographic area (Table 4). Whites comprised 65% of new HIV case diagnoses in 2008 in Outstate, but only 32% of new HIV cases in St. Louis City. Differences in the general population distribution of each of these geographic areas likely explain the variation observed. The difference in the rate of new HIV case diagnoses by race/ethnicity also varied by geographic area. In Outstate, the rate of new HIV cases was 10.4 times greater in blacks than whites, and 2.6 times greater in Hispanics than whites. In comparison, the rate is only 1.8 times greater in blacks than whites, and 1.4 times greater in Hispanics than whites in St. Louis City. The rate of new HIV case diagnoses among Hispanics (11.8) was lower than the rate among whites (14.2) in Kansas City. This was the only geographic area where the rate of new HIV case diagnoses was lower for Hispanics compared to whites. However, the number of cases among Hispanics was small, and therefore the rates should be interpreted with caution.

Similar patterns observed for the geographic areas were also present by HIV region (Table 5). In the Northwest HIV region, whites represented 89% of new HIV case diagnoses. Whereas whites represented only 35% of new HIV cases in the St. Louis HIV region and Missouri correctional facilities. The rate of new HIV case diagnoses was 13.2 and 11.3 times higher for blacks than whites in the Southwest and North Central HIV regions, respectively. In contrast, the rate was only 6.4 and 5.5 times higher for blacks than whites in the St. Louis and Kansas City HIV regions, respectively. The rate of new diagnoses among Hispanics compared to whites was 3.8 times greater in the St. Louis HIV region, but only 1.5 times higher in the Kansas City HIV region.

**Table 6. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Missouri, 2008**

Race/Ethnicity	<b>HIV Cases*</b>				<b>AIDS Cases</b>			
	<b>Newly Diagnosed</b>		<b>Living</b>		<b>Newly Diagnosed**</b>		<b>Living</b>	
	<b>Cases</b>	<b>%</b>	<b>Cases</b>	<b>%</b>	<b>Cases</b>	<b>%</b>	<b>Cases</b>	<b>%</b>
White	95	46.8%	1616	57.6%	32	46.4%	2150	60.7%
Black	94	46.3%	1049	37.4%	33	47.8%	1256	35.5%
Hispanic	11	5.4%	109	3.9%	4	5.8%	104	2.9%
Other/Unknown	3	1.5%	31	1.1%	0	0.0%	33	0.9%
<b>MISSOURI TOTAL ***</b>	<b>203</b>	<b>100.0%</b>	<b>2,805</b>	<b>100.0%</b>	<b>69</b>	<b>100.0%</b>	<b>3,543</b>	<b>100.0%</b>
*Remained HIV cases at the end of the year. **Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008. ***Totals include persons diagnosed in Missouri correctional facilities. Note: Percentages may not total due to rounding.								

**Table 7. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Missouri, 2008**

Age Group	<b>White</b>		<b>Black</b>		<b>Hispanic</b>		<b>Total*</b>	
	<b>Cases</b>	<b>%**</b>	<b>Cases</b>	<b>%**</b>	<b>Cases</b>	<b>%**</b>	<b>Cases</b>	<b>%**</b>
13-18	0	0.0%	13	0.6%	0	0.0%	15	0.2%
19-24	47	1.2%	175	7.6%	7	3.3%	230	3.6%
25-44	1550	41.2%	1209	52.5%	127	59.6%	2919	46.0%
45-64	2015	53.5%	865	37.5%	74	34.7%	2979	46.9%
65+	154	4.1%	43	1.9%	5	2.3%	205	3.2%
<b>MISSOURI TOTAL</b>	<b>3,766</b>	<b>100.0%</b>	<b>2,305</b>	<b>100.0%</b>	<b>213</b>	<b>100.0%</b>	<b>6,348</b>	<b>100.0%</b>
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities. **Percentage of cases per age group. Note: Percentages may not total due to rounding.								

The data presented for each exposure category for Tables 6-17 have not been adjusted to redistribute individuals with missing exposure category information. Therefore these data only represent those individuals with an exposure category reported to MDHSS. The total number of individuals in each exposure category is likely underestimated, especially among those newly diagnosed in 2008. These data are subject to change.

There were a total of 272 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2008 (Table 6). Blacks and whites represented a nearly equal proportion of both new HIV and new AIDS cases among MSM. In contrast, whites represented a larger proportion of MSM living with both HIV and AIDS compared to blacks. Of the newly diagnosed cases among MSM, 25% progressed to AIDS by the end of 2008. There were not significant differences in the proportion of newly diagnosed cases that progressed to AIDS by race/ethnicity. Both blacks and Hispanics represented a greater proportion of new HIV and AIDS cases compared to the proportion they represented among living cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 7). Among white MSM living with HIV disease, the majority (54%) were between 45-64 years of age at the end of 2008. In contrast, only 38% and 35% of living black and Hispanic MSM with HIV disease were between 45-64 years of age. The majority of black and Hispanic MSM living with HIV disease were between 25-44 years of age at the end of 2008. Black MSM represented the largest number of individuals living with HIV who were less than 25 years of age at the end of 2008 (188).

**Table 8. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, by HIV region, Missouri, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	1,024	51.1%	929	46.3%	33	1.6%	2,005	31.6%
St. Louis County	534	52.6%	435	42.8%	38	3.7%	1,016	16.0%
Kansas City	922	57.8%	562	35.2%	91	5.7%	1,596	25.1%
Outstate	1,193	84.4%	162	11.5%	45	3.2%	1,414	22.3%
Missouri Correctional Facilities	93	29.3%	217	68.5%	6	1.9%	317	5.0%
<b>MISSOURI TOTAL</b>	<b>3,766</b>	<b>59.3%</b>	<b>2,305</b>	<b>36.3%</b>	<b>213</b>	<b>3.4%</b>	<b>6,348</b>	<b>100.0%</b>
<b>HIV Region</b>								
St. Louis Region	1,713	53.5%	1,386	43.3%	75	2.3%	3,203	50.5%
Kansas City Region	1,254	62.6%	615	30.7%	109	5.4%	2,003	31.6%
Northwest Region	49	92.5%	4	7.5%	0	0.0%	53	0.8%
North Central Region	185	77.4%	43	18.0%	9	3.8%	239	3.8%
Southwest Region	366	90.4%	22	5.4%	11	2.7%	405	6.4%
Southeast Region	106	82.8%	18	14.1%	3	2.3%	128	2.0%
Missouri Correctional Facilities	93	29.3%	217	68.5%	6	1.9%	317	5.0%
<b>MISSOURI TOTAL</b>	<b>3,766</b>	<b>59.3%</b>	<b>2,305</b>	<b>36.3%</b>	<b>213</b>	<b>3.4%</b>	<b>6,348</b>	<b>100.0%</b>
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race/ethnicity in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total due to rounding.								

Of the 6,348 MSM living with HIV disease at the end of 2008, the largest proportion were diagnosed in St. Louis City (32%), followed by Kansas City (25%) (Table 8). There were differences in the proportion of living HIV disease cases among MSM diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 84% of persons living with HIV disease attributed to MSM were white. Whereas only 29% of MSM living with HIV disease who were diagnosed in Missouri correctional facilities were white. The differences were likely due to variations in the general population of the geographic areas.

Similar patterns were also seen for the HIV regions. The St. Louis HIV region represented 50% of all living cases among MSM and the Kansas City HIV region comprised 32%. The proportion of white living cases among MSM was highest in the Northwest HIV region and lowest in Missouri correctional facilities.

**Table 9. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Missouri, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	15	83.3%	143	65.3%	5	83.3%	250	61.3%
Black	3	16.7%	69	31.5%	0	0.0%	144	35.3%
Hispanic	0	0.0%	4	1.8%	1	16.7%	12	2.9%
Other/Unknown	0	0.0%	3	1.4%	0	0.0%	2	0.5%
<b>MISSOURI TOTAL ***</b>	<b>18</b>	<b>100.0%</b>	<b>219</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>408</b>	<b>100.0%</b>
*Remained HIV cases at the end of the year. **Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008. ***Totals include persons diagnosed in Missouri correctional facilities. Note: Percentages may not total due to rounding.								

**Table 10. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Missouri, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	4	1.0%	3	1.4%	0	0.0%	7	1.1%
25-44	159	40.5%	75	35.2%	10	62.5%	245	39.1%
45-64	224	57.0%	131	61.5%	6	37.5%	365	58.2%
65+	6	1.5%	4	1.9%	0	0.0%	10	1.6%
<b>MISSOURI TOTAL</b>	<b>393</b>	<b>100.0%</b>	<b>213</b>	<b>100.0%</b>	<b>16</b>	<b>100.0%</b>	<b>627</b>	<b>100.0%</b>
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities. **Percentage of cases per age group. Note: Percentages may not total due to rounding.								

There were a total of 24 new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2008 (Table 9). Whites represented the majority (83%) of both new HIV and new AIDS cases among MSM/IDU. Of the newly diagnosed cases, 25% progressed to AIDS by the end of 2008. Whites also represented the majority of living HIV and AIDS cases, 65% and 61%, respectively among MSM/IDU.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 10). Among white and black MSM/IDU living with HIV disease, the majority, 57% and 62%, were between 45-64 years of age at the end of 2008. In contrast, only 38% of living Hispanic MSM/IDU with HIV disease were between 45-64 years of age. The majority of Hispanic MSM/IDU living with HIV disease were between 25-44 years of age at the end of 2008.

**Table 11. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by geographic area, by HIV region, Missouri, 2008**

Geographic Area	<u>White</u>		<u>Black</u>		<u>Hispanic</u>		<u>Total*</u>	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	54	41.2%	75	57.3%	1	0.8%	131	20.9%
St. Louis County	24	55.8%	19	44.2%	0	0.0%	43	6.9%
Kansas City	105	65.2%	43	26.7%	11	6.8%	161	25.7%
Outstate	170	87.2%	19	9.7%	4	2.1%	195	31.1%
Missouri Correctional Facilities	40	41.2%	57	58.8%	0	0.0%	97	15.5%
<b>MISSOURI TOTAL</b>	<b>393</b>	<b>62.7%</b>	<b>213</b>	<b>34.0%</b>	<b>16</b>	<b>2.6%</b>	<b>627</b>	<b>100.0%</b>
<b><u>HIV Region</u></b>								
St. Louis Region	90	48.1%	95	50.8%	1	0.5%	187	29.8%
Kansas City Region	147	69.7%	51	24.2%	11	5.2%	211	33.7%
Northwest Region	12	85.7%	1	7.1%	0	0.0%	14	2.2%
North Central Region	21	84.0%	2	8.0%	2	8.0%	25	4.0%
Southwest Region	63	88.7%	5	7.0%	2	2.8%	71	11.3%
Southeast Region	20	90.9%	2	9.1%	0	0.0%	22	3.5%
Missouri Correctional Facilities	40	41.2%	57	58.8%	0	0.0%	97	15.5%
<b>MISSOURI TOTAL</b>	<b>393</b>	<b>62.7%</b>	<b>213</b>	<b>34.0%</b>	<b>16</b>	<b>2.6%</b>	<b>627</b>	<b>100.0%</b>
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities.								
**Percentage of race/ethnicity in each area/region.								
***Percentage of cases per area/region.								
Note: Percentages may not total due to rounding.								

Of the 627 MSM/IDU living with HIV disease at the end of 2008, the largest proportion were diagnosed in Outstate Missouri (31%), followed by Kansas City (26%) (Table 11). There were differences in the proportion of living HIV disease cases among MSM/IDU diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 87% of living cases attributed to MSM/IDU were white. Whereas only 41% of living cases diagnosed in St. Louis City and Missouri correctional facilities among MSM/IDU were white. The differences were likely due to variations in the general population of the geographic areas.

The Kansas City HIV region represented 34% of all living cases among MSM/IDU, and the St. Louis HIV region comprised 30%. The proportion of white living cases among MSM/IDU was highest in the Southeast HIV region (91%) and lowest in Missouri correctional facilities (41%).

**Table 12. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Missouri, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	14.3%	94	33.8%	2	28.6%	124	28.4%
Black Male	1	14.3%	84	30.2%	2	28.6%	154	35.3%
Hispanic Male	0	0.0%	5	1.8%	0	0.0%	12	2.8%
White Female	4	57.1%	54	19.4%	2	28.6%	60	13.8%
Black Female	1	14.3%	35	12.6%	1	14.3%	79	18.1%
Hispanic Female	0	0.0%	2	0.7%	0	0.0%	6	1.4%
<b>MISSOURI TOTAL ***</b>	<b>7</b>	<b>100.0%</b>	<b>278</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>436</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

\*\*\*Totals include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

**Table 13. Living HIV disease cases in injecting drug users, by selected race/ethnicity and sex, by current age group, Missouri, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	3	1.4%	1	0.4%	5	4.4%	0	0.0%	10	1.4%
25-44	86	39.4%	70	29.4%	56	49.1%	49	43.0%	273	38.2%
45-64	121	55.5%	158	66.4%	53	46.5%	60	52.6%	407	57.0%
65+	8	3.7%	9	3.8%	0	0.0%	5	4.4%	24	3.4%
<b>MISSOURI TOTAL</b>	<b>218</b>	<b>100.0%</b>	<b>238</b>	<b>100.0%</b>	<b>114</b>	<b>100.0%</b>	<b>114</b>	<b>100.0%</b>	<b>714</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

There were a total of 14 new HIV disease diagnoses attributed to persons who inject drugs (IDU) in 2008 (Table 12). The small number of new cases diagnosed among IDU make patterns by race/ethnicity and sex difficult to interpret. Although based on a small number of cases, 50% of newly diagnosed cases progressed to AIDS by the end of 2008. Males represented approximately 67% of all living HIV disease cases among IDU. There were not significant differences in the proportion of living cases among IDU attributed to males between individuals classified as HIV cases versus AIDS cases. There were differences in the distribution of living cases by race/ethnicity and sex among IDU between those classified as HIV cases compared to those classified as AIDS cases. Among living IDU HIV cases, white males represented the largest proportion of cases (34%). In comparison, black males represented the largest proportion (35%) of living AIDS cases among IDU.

The distribution of living HIV disease cases by current age varied by race/ethnicity and sex among IDU (Table 13). Persons aged 45-64 represented the greatest proportion of living HIV disease cases among IDU in white males (56%), black males (66%) and black females (53%). However, among white female IDU, women 25-44 years of age represented the largest proportion of living HIV disease cases (49%).

**Table 14. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by geographic area, by HIV region, Missouri, 2008**

Geographic Area	<u>White</u>		<u>Black</u>		<u>Hispanic</u>		<u>Total*</u>	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	26	15.9%	136	82.9%	1	0.6%	164	23.0%
St. Louis County	21	38.9%	31	57.4%	1	1.9%	54	7.6%
Kansas City	45	32.1%	81	57.9%	13	9.3%	140	19.6%
Outstate	186	79.8%	40	17.2%	6	2.6%	233	32.6%
Missouri Correctional Facilities	54	43.9%	64	52.0%	4	3.3%	123	17.2%
<b>MISSOURI TOTAL</b>	<b>332</b>	<b>46.5%</b>	<b>352</b>	<b>49.3%</b>	<b>25</b>	<b>3.5%</b>	<b>714</b>	<b>100.0%</b>
<b>HIV Region</b>								
St. Louis Region	79	31.5%	168	66.9%	2	0.8%	251	35.2%
Kansas City Region	84	43.3%	94	48.5%	15	7.7%	194	27.2%
Northwest Region	3	60.0%	2	40.0%	0	0.0%	5	0.7%
North Central Region	23	71.9%	9	28.1%	0	0.0%	32	4.5%
Southwest Region	67	84.8%	8	10.1%	3	3.8%	79	11.1%
Southeast Region	22	73.3%	7	23.3%	1	3.3%	30	4.2%
Missouri Correctional Facilities	54	43.9%	64	52.0%	4	3.3%	123	17.2%
<b>MISSOURI TOTAL</b>	<b>332</b>	<b>46.5%</b>	<b>352</b>	<b>49.3%</b>	<b>25</b>	<b>3.5%</b>	<b>714</b>	<b>100.0%</b>
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race/ethnicity in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total due to rounding.								

Of the 714 IDU living with HIV disease at the end of 2008, the largest proportion were diagnosed in Outstate Missouri (33%), followed by St. Louis City (23%) (Table 14). There were differences in the proportion of living HIV disease cases among IDU diagnosed in each geographic area by race/ethnicity. In Outstate Missouri, 80% of living cases attributed to IDU were white. Whereas only 16% of living cases diagnosed in St. Louis City among IDU were white. The differences are likely due to variations in the general population of the geographic areas. Blacks represented a larger proportion of living HIV disease cases among IDU (49%) compared to MSM (36%) and MSM/IDU (34%).

The St. Louis HIV region represented 35% of all living cases among IDU, and the Kansas City HIV region comprised 27%. The proportion of white living cases among IDU was highest in the Southwest HIV region (85%) and lowest in the St. Louis HIV region (32%).

**Table 15. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Missouri, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	4.8%	60	8.2%	0	0.0%	59	7.6%
Black Male	2	9.5%	127	17.4%	1	20.0%	154	19.9%
Hispanic Male	0	0.0%	1	0.1%	0	0.0%	8	1.0%
White Female	7	33.3%	200	27.5%	2	40.0%	184	23.8%
Black Female	11	52.4%	319	43.8%	2	40.0%	348	45.0%
Hispanic Female	0	0.0%	13	1.8%	0	0.0%	11	1.4%
<b>MISSOURI TOTAL ***</b>	<b>21</b>	<b>100.0%</b>	<b>728</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>774</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

\*\*\*Total includes cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

**Table 16. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Missouri, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	1	0.3%	2	0.3%	3	0.2%
19-24	0	0.0%	6	2.1%	6	1.6%	10	1.5%	23	1.5%
25-44	36	30.3%	154	54.8%	210	54.7%	450	67.5%	883	58.8%
45-64	67	56.3%	107	38.1%	149	38.8%	190	28.5%	530	35.3%
65+	16	13.4%	14	5.0%	18	4.7%	15	2.2%	63	4.2%
<b>MISSOURI TOTAL</b>	<b>119</b>	<b>100.0%</b>	<b>281</b>	<b>100.0%</b>	<b>384</b>	<b>100.0%</b>	<b>667</b>	<b>100.0%</b>	<b>1,502</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Totals include persons diagnosed in Missouri correctional facilities.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

There were a total of 26 new HIV disease diagnoses attributed to heterosexual contact in 2008 (Table 15). Black females represented the largest number of new HIV disease diagnoses among heterosexuals. The small number of newly diagnosed cases make patterns by race/ethnicity and sex difficult to interpret. Although based on a small number of cases, 19% of newly diagnosed cases progressed to AIDS by the end of 2008. Females represented 74% of living HIV cases and 71% of living AIDS cases among heterosexual contact cases. The distribution by race/ethnicity and sex among living heterosexual contact cases was similar between those classified as HIV cases and AIDS cases.

For all race/ethnicity and sex categories among heterosexual contact cases, except white males, the greatest proportion of living cases was between 25-44 years of age (Table 16). This was different than the distributions observed among the other exposure categories, where the majority of individuals were currently between 45-64 years of age. The difference could be related to the fact that heterosexual contact cases were diagnosed more recently, on average, compared to persons in other exposure categories, or that persons who attributed their infection to heterosexual contact were younger at the time of diagnosis than persons in other exposure categories.

**Table 17. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, by HIV region, Missouri, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	76	14.8%	424	82.7%	9	1.8%	513	34.2%
St. Louis County	67	24.6%	195	71.7%	5	1.8%	272	18.1%
Kansas City	54	29.8%	115	63.5%	9	5.0%	181	12.1%
Outstate	284	67.8%	120	28.6%	9	2.1%	419	27.9%
Missouri Correctional Facilities	22	18.8%	94	80.3%	1	0.9%	117	7.8%
<b>MISSOURI TOTAL</b>	<b>503</b>	<b>33.5%</b>	<b>948</b>	<b>63.1%</b>	<b>33</b>	<b>2.2%</b>	<b>1,502</b>	<b>100.0%</b>
<b>HIV Region</b>								
St. Louis Region	187	22.3%	627	74.6%	16	1.9%	840	55.9%
Kansas City Region	98	39.7%	135	54.7%	10	4.0%	247	16.4%
Northwest Region	8	66.7%	4	33.3%	0	0.0%	12	0.8%
North Central Region	56	64.4%	26	29.9%	3	3.4%	87	5.8%
Southwest Region	94	76.4%	25	20.3%	2	1.6%	123	8.2%
Southeast Region	38	50.0%	37	48.7%	1	1.3%	76	5.1%
Missouri Correctional Facilities	22	18.8%	94	80.3%	1	0.9%	117	7.8%
<b>MISSOURI TOTAL</b>	<b>503</b>	<b>33.5%</b>	<b>948</b>	<b>63.1%</b>	<b>33</b>	<b>2.2%</b>	<b>1,502</b>	<b>100.0%</b>
*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed. Missouri totals include persons diagnosed in Missouri correctional facilities. **Percentage of race in each area/region. ***Percentage of cases per area/region. Note: Percentages may not total due to rounding.								

Of the 1,502 living cases among heterosexual contacts at the end of 2008, the largest proportion were diagnosed in St. Louis City (34%); the next highest was Outstate Missouri (28%) (Table 17). There were differences in the proportion of living HIV disease cases among heterosexuals diagnosed in each geographic area by race/ethnicity. In Outstate, 68% of living cases attributed to heterosexual contact were white. Whereas only 15% of living cases diagnosed in St. Louis City among heterosexual contact cases were white. The differences are likely due to variations in the general population of the geographic areas. Blacks represented a larger proportion of living HIV disease cases among heterosexual contact cases (63%) compared to all other exposure categories, primarily due to the large number of black females reporting heterosexual contact as their primary mode of exposure.

The St. Louis HIV region represented 56% of all living cases among heterosexuals, and the Kansas City HIV region comprised 16%. The proportion of white living cases among heterosexuals was highest in the Southwest HIV region (76%) and lowest in Missouri correctional facilities (19%).

**Table 18. Deaths\* among HIV cases, by mode of transmission, by selected race and sex, Missouri, 1982—2008**

Mode of Transmission	White Males		Black Males		White Females		Black Females		Total**	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
MSM	91	60.7%	49	51.0%	0	0.0%	0	0.0%	142	47.7%
MSM/IDU	25	16.7%	7	7.3%	0	0.0%	0	0.0%	33	11.1%
IDU	12	8.0%	10	10.4%	3	16.7%	12	46.2%	39	13.1%
Heterosexual Contact	1	0.7%	11	11.5%	8	44.4%	8	30.8%	29	9.7%
No Indicated Risk (NIR)	18	12.0%	18	18.8%	7	38.9%	5	19.2%	50	16.8%
<b>MISSOURI TOTAL***</b>	<b>150</b>	<b>100.0%</b>	<b>96</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>	<b>26</b>	<b>100.0%</b>	<b>298</b>	<b>100.0%</b>

\*May or may not be due to HIV-related illnesses.

\*\*Totals include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*\*Total (numbers and percentages) include 5 cases (1.7%) with a mode of transmission not indicated on the table, such as hemophilia/coagulation disorder, blood transfusion or tissue recipient, etc. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

**Table 19. Deaths\* among AIDS cases, by mode of transmission, by selected race and sex, Missouri, 1982—2008**

Mode of Transmission	White Males		Black Males		White Females		Black Females		Total**	
	Cases	%	Cases	%	Cases	%	Cases	%	Cases	%
MSM	2,856	78.9%	1,036	71.2%	0	0.0%	0	0.0%	3,994	69.3%
MSM/IDU	358	9.9%	153	10.5%	0	0.0%	0	0.0%	524	9.1%
IDU	135	3.7%	136	9.3%	63	27.3%	80	26.9%	431	7.5%
Heterosexual Contact	54	1.5%	57	3.9%	120	51.9%	182	61.3%	419	7.3%
No Indicated Risk (NIR)	78	2.2%	53	3.6%	21	9.1%	15	5.1%	178	3.1%
<b>MISSOURI TOTAL***</b>	<b>3,622</b>	<b>100.0%</b>	<b>1,456</b>	<b>100.0%</b>	<b>231</b>	<b>100.0%</b>	<b>297</b>	<b>100.0%</b>	<b>5,760</b>	<b>100.0%</b>

\*May or may not be due to AIDS-related illnesses.

\*\*Totals include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*\*Total (numbers and percentages) include 214 cases (3.7%) with a mode of transmission not indicated on the table, such as hemophilia/coagulation disorder, blood transfusion or tissue recipient, etc. Totals include persons diagnosed in Missouri correctional facilities.

Note: Percentages may not total due to rounding.

The number of deaths that have occurred among persons still classified as HIV cases at the time of death was small (298) in comparison to the number of deaths among persons classified as AIDS (5,760) (Tables 18 and 19). The majority of deaths among HIV cases have occurred among white males (50%) (Table 18). There were differences in the distribution of deaths among HIV cases by mode of transmission among the race/ethnicity and sex categories. Among males, the majority of deaths among HIV cases have been attributed to MSM. Among white female HIV cases, the largest number of deaths occurred among cases attributed to heterosexual contact. Among black females the largest number of deaths occurred among cases attributed to IDU. There was a large proportion of HIV cases among individuals with no indicated risk, especially among white females. Similar patterns were observed for deaths among AIDS cases, except the largest number of deaths among black females was attributed to heterosexual contact, instead of IDU (Table 19). The proportion of deaths among those with no indicated risk among AIDS cases was smaller than among HIV cases, likely because there was more time to obtain exposure category information.

**Table 20. Newly diagnosed and living HIV and AIDS cases with exposure category assignments for Missouri, 2008**

Exposure category	HIV cases				AIDS cases			
	2008*		Living		2008**		Living	
<b>Adult/Adolescent</b>								
Men who have sex with men	312	73.2%	3,335	67.1%	111	69.8%	3,863	66.9%
Men who have sex with men and inject drugs	28	6.6%	257	5.2%	9	5.7%	444	7.7%
Injecting drug use	16	3.8%	349	7.0%	17	10.7%	498	8.6%
Heterosexual contact	70	16.4%	1,005	20.2%	22	13.8%	922	16.0%
Hemophilia/coagulation disorder	0	0.0%	20	0.4%	0	0.0%	41	0.7%
Blood transfusion or tissue recipient	0	0.0%	2	0.0%	0	0.0%	9	0.2%
No indicated risk (NIR)	-----	-----	-----	-----	-----	-----	-----	-----
<b>ADULT/ADOLESCENT SUBTOTAL</b>	<b>426</b>	<b>100.0%</b>	<b>4,970 †</b>	<b>100.0%</b>	<b>159</b>	<b>100.0%</b>	<b>5,778 †</b>	<b>100.0%</b>
<b>Pediatric (&lt;13 years old)</b>								
<b>PEDIATRIC SUBTOTAL</b>	<b>3</b>	<b>100.0%</b>	<b>56</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>30</b>	<b>100.0%</b>
<b>TOTAL</b>	<b>429</b>		<b>5,026</b>		<b>159</b>		<b>5,808</b>	

\*HIV cases reported during 2008 which remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes 2 cases with a confirmed "other" exposure category among persons living with HIV and 1 case among persons living with AIDS.

Note: Percentages may not total due to rounding.

The data in Table 20 have been adjusted to proportionately re-distribute individuals with no indicated risk factor based on sex and race/ethnicity to known exposure categories. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and AIDS cases, MSM represented the greatest proportion of cases. The proportion of MSM cases was greater for new HIV and AIDS cases compared to the proportion among their respective living cases. This may indicate changes in how individuals are being infected over time. However, the observed pattern may also be related to the method used to re-distribute those with unknown risks. The method used to re-distribute new cases may weight those with no indicated risk more heavily to the MSM category. There were 3 new HIV cases diagnosed among children less than 13 years of age in 2008.

The majority of HIV disease cases diagnosed in 2008 (92%) and those living with HIV disease (92%) were residents of a metropolitan area at the time of diagnosis. For a list of counties that were classified as a metropolitan area refer to the Appendix. There were differences in the proportion of living HIV disease cases by sex based on the population of the area of residence. The proportion of males living with HIV disease decreased as the population of the area of residence decreased. Whereas 84% of living HIV disease cases in metropolitan areas occurred among males, only 73% of living cases in nonmetropolitan areas were among males. There were differences in the distribution of new and living HIV disease cases by race/ethnicity based on the population of the area of residence. For both new and living HIV disease cases, as the population of the area of residence became smaller, the proportion of cases that occurred among whites increased. For example, only 41% of new HIV disease diagnoses were among whites in metropolitan areas. But in nonmetropolitan areas whites comprised 88% of new diagnoses. There were also differences based on the population of area of residence in the distribution of new and living HIV disease cases by exposure category. As the population of the area of residence decreased, the proportion of cases attributed to IDU and heterosexual contact increased. Individuals 19-24 years of age made up a slightly greater proportion of new diagnoses in metropolitan areas (21%) compared to micropolitan (18%) and nonmetropolitan areas (12%). Among those living with HIV disease, the proportion of cases diagnosed between 25-44 years of age decreased as the population of the area of residence decreased. The proportion of living cases diagnosed between 45-64 years of age increased as the population of the area of residence decreased.

**Table 21. Newly diagnosed and living HIV disease\* cases, by population of area of residence at time of diagnosis, by sex, by race/ethnicity, by exposure category and age at diagnosis, Missouri, 2008<sup>†</sup>**

	Newly Diagnosed						Living					
	Metropolitan Area**			Micropolitan Area***			Nonmetropolitan Area****			Metropolitan Area**		
	Cases	%		Cases	%		Cases	%		Cases	%	
<b>Sex</b>												
Male	424	81.2%	15	88.2%	20	80.0%	7,795	83.8%	336	77.1%	252	73.0%
Female	98	18.8%	2	11.8%	5	20.0%	1,503	16.2%	100	22.9%	93	27.0%
Total	522	100.0%	17	100.0%	25	100.0%	9,298	100.0%	436	100.0%	345	100.0%
<b>Race/Ethnicity</b>												
White	216	41.4%	10	58.8%	22	88.0%	4,775	51.4%	321	73.6%	278	80.6%
Black	272	52.1%	6	35.3%	3	12.0%	4,063	43.7%	98	22.5%	54	15.7%
Hispanic	25	4.8%	1	5.9%	0	0.0%	338	3.6%	14	3.2%	10	2.9%
Other/Unknown	9	1.7%	0	0.0%	0	0.0%	122	1.3%	3	0.7%	3	0.9%
Total	522	100.0%	17	100.0%	25	100.0%	9,298	100.0%	436	100.0%	345	100.0%
<b>Exposure Category</b>												
Men who have sex with men	238	45.6%	8	47.1%	14	56.0%	5,684	61.1%	198	45.4%	149	43.2%
Men who have sex with men and inject drugs	18	3.4%	2	11.8%	1	4.0%	471	5.1%	36	8.3%	23	6.7%
Injecting drug use	10	1.9%	1	5.9%	3	12.0%	522	5.6%	36	8.3%	33	9.6%
Heterosexual contact	23	4.4%	0	0.0%	2	8.0%	1,218	13.1%	87	20.0%	80	23.2%
No Indicated Risk (NIR)	231	44.3%	5	29.4%	5	20.0%	1,279	13.8%	65	14.9%	45	13.0%
Other	0	0.0%	0	0.0%	0	0.0%	55	0.6%	6	1.4%	8	2.3%
Pediatric	2	0.4%	1	5.9%	0	0.0%	69	0.7%	8	1.8%	7	2.0%
Total	522	100.0%	17	100.0%	25	100.0%	9,298	100.0%	436	100.0%	345	100.0%
<b>Age at Diagnosis</b>												
<2	2	0.4%	1	5.9%	0	0.0%	43	0.5%	5	1.1%	4	1.2%
2-12	0	0.0%	0	0.0%	0	0.0%	19	0.2%	2	0.5%	3	0.9%
13-18	21	4.0%	0	0.0%	1	4.0%	220	2.4%	9	2.1%	8	2.3%
19-24	111	21.3%	3	17.6%	3	12.0%	1,119	12.0%	51	11.7%	35	10.1%
25-44	277	53.1%	10	58.8%	12	48.0%	6,432	69.2%	281	64.4%	214	62.0%
45-64	106	20.3%	3	17.6%	9	36.0%	1,405	15.1%	88	20.2%	76	22.0%
65+	5	1.0%	0	0.0%	0	0.0%	60	0.6%	0	0.0%	5	1.4%
Total	522	100.0%	17	100.0%	25	100.0%	9,298	100.0%	436	100.0%	345	100.0%

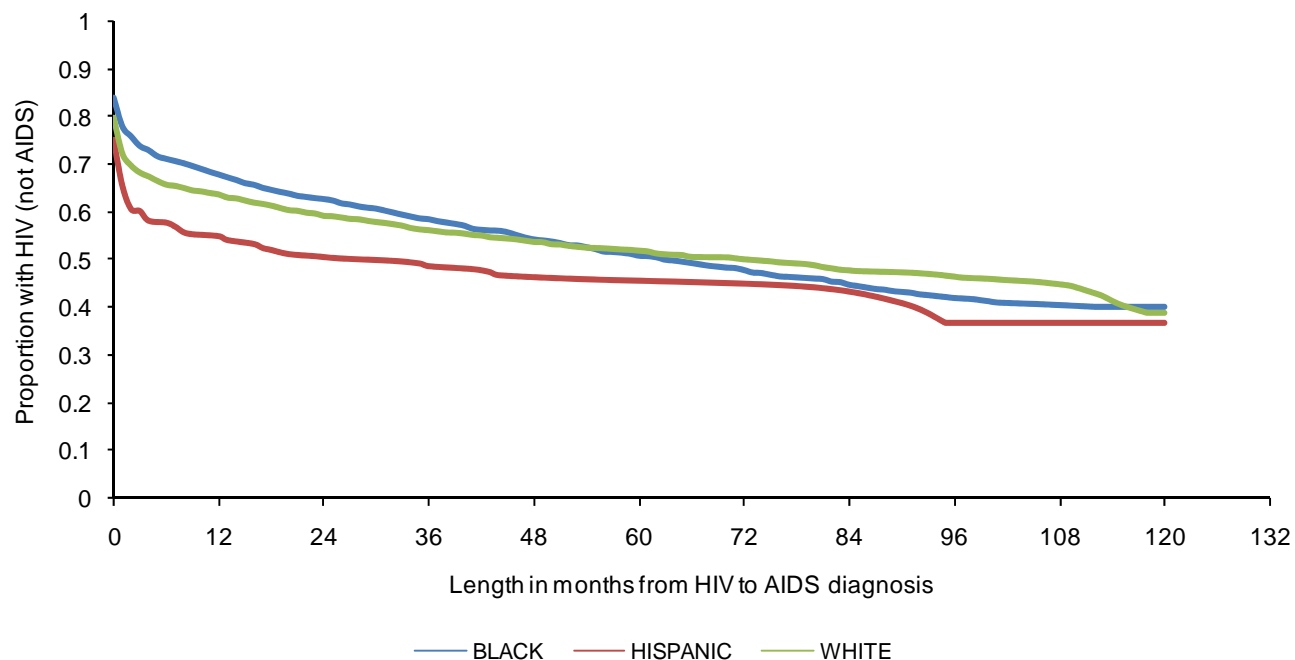
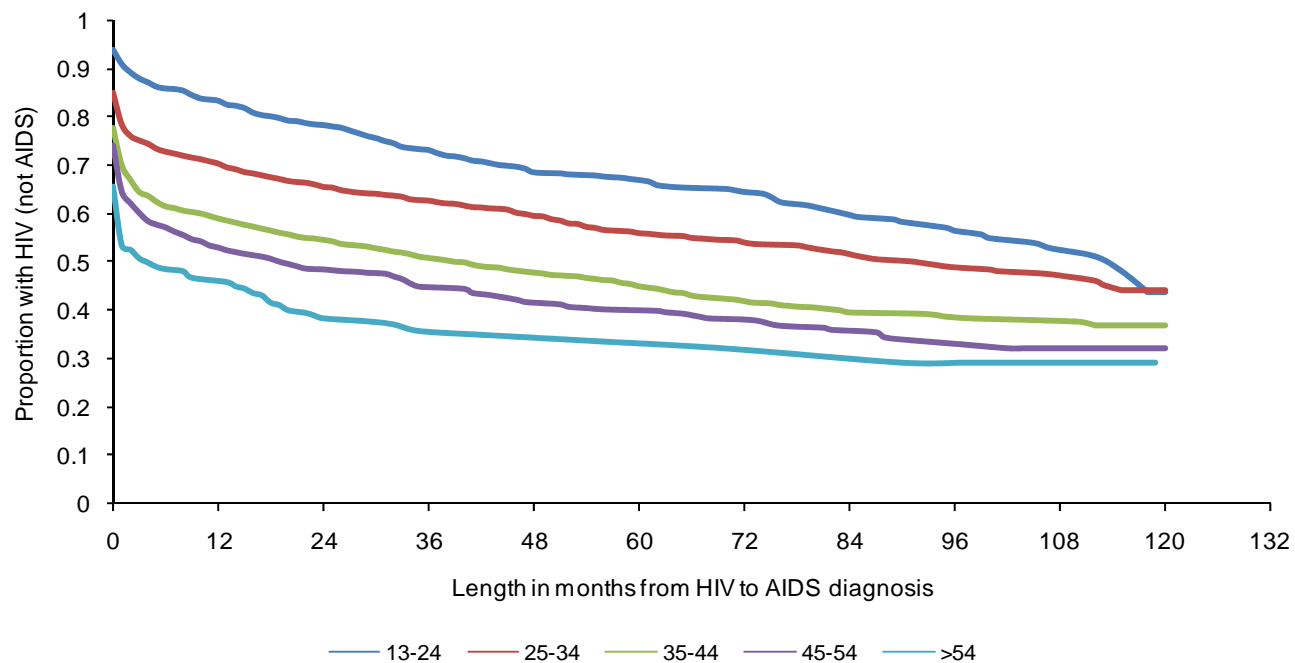
\*Includes all individuals diagnosed with the HIV virus, regardless of current status (i.e., HIV or AIDS)

<sup>†</sup>Does not include persons diagnosed in Missouri correctional facilities.

\*\*A metropolitan area contains a core urban area with a population of at least 50,000. It also includes adjacent counties that have a high degree of social and economic integration with the core urban area. Based on 2006 US Census estimates. See Appendix for map of included counties.

\*\*\*A micropolitan area contains a core urban area with a population between 10,000-49,999. It also includes adjacent counties that have a high degree of social and economic integration with the core urban area. Based on 2006 US Census estimates. See Appendix for map of included counties.

\*\*\*\*An area that does not meet the population requirements for the metropolitan or micropolitan area. Based on 2006 US Census estimates. See Appendix for map of included counties.

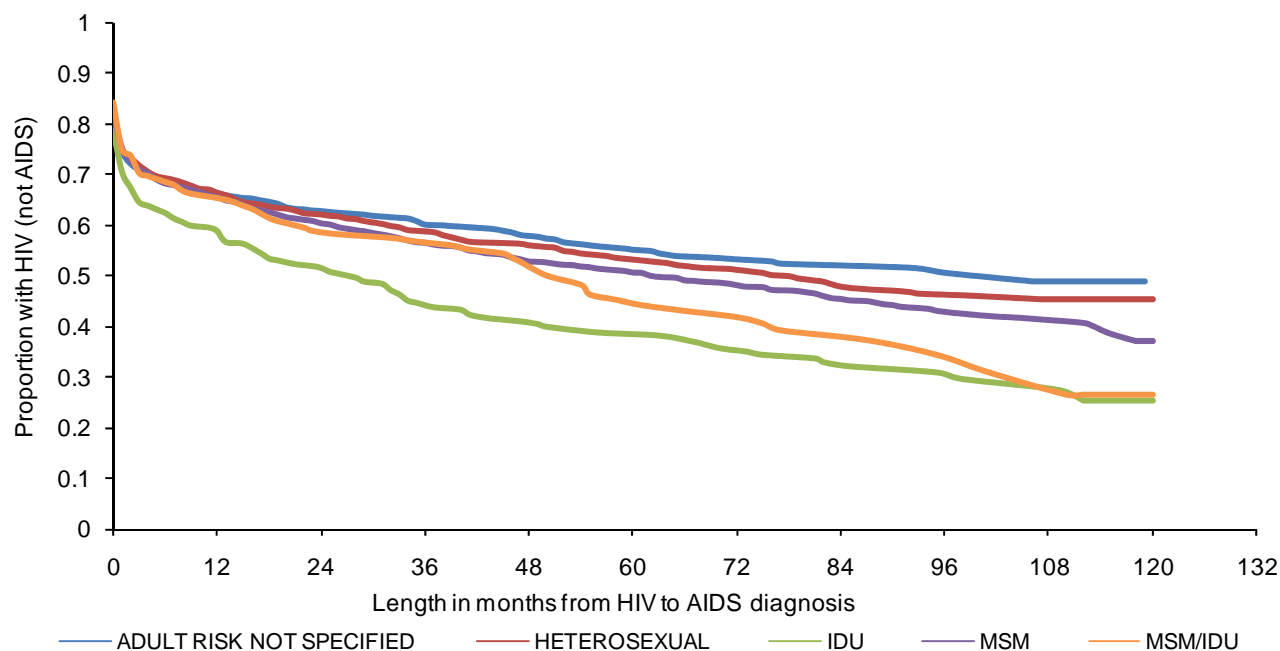
**Figure 10. Length of time between HIV and AIDS diagnosis, by race/ethnicity, Missouri, 1999-2007****Figure 11. Length of time between HIV and AIDS diagnosis, by age at diagnosis\*, Missouri, 1999-2007**

\*Age at earliest diagnosis of HIV disease, regardless of disease progression.

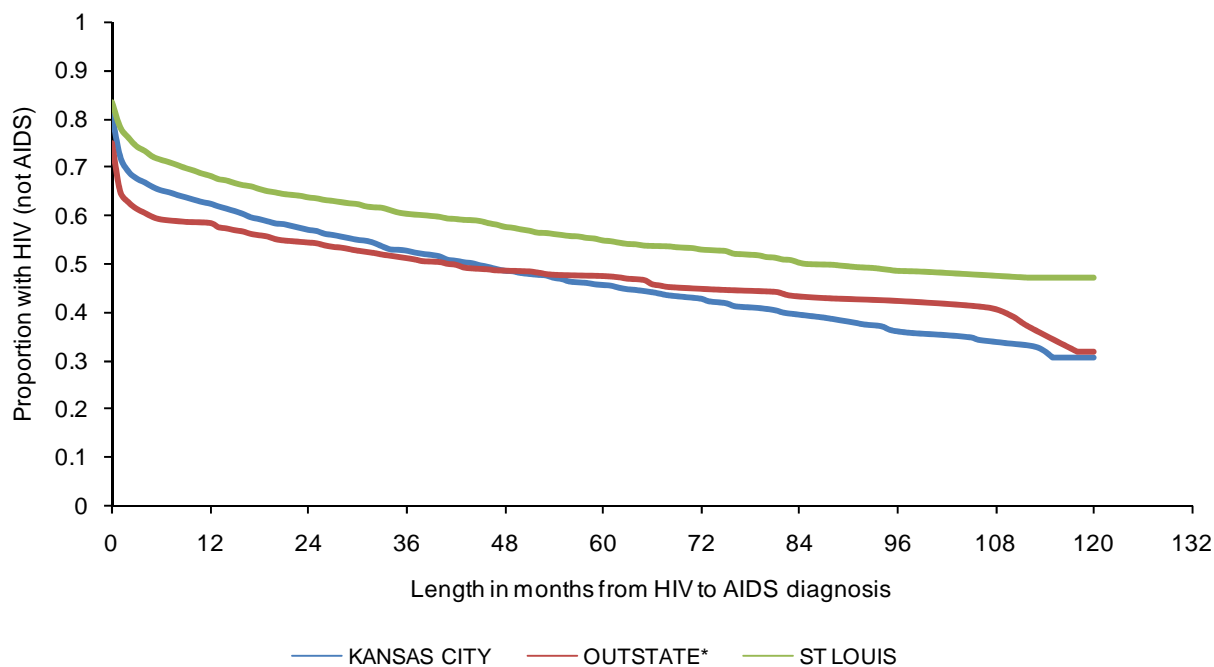
A greater proportion of Hispanics progressed from HIV to AIDS within 12 months of their HIV diagnosis compared to whites and blacks (Figure 10). Around 84 months after the initial HIV diagnosis, the proportion of cases that progressed to AIDS was similar by race/ethnicity. It is important to note that for all curves displayed, data in the later months should be interpreted with caution as it is based on small numbers.

There were differences in the progression from HIV to AIDS by the age at HIV diagnosis (Figure 11). Over time, the proportion of cases that progressed to AIDS remained higher as the age at initial HIV diagnosis increased.

**Figure 12. Length of time between HIV and AIDS diagnosis, by mode of transmission, Missouri, 1999-2007**



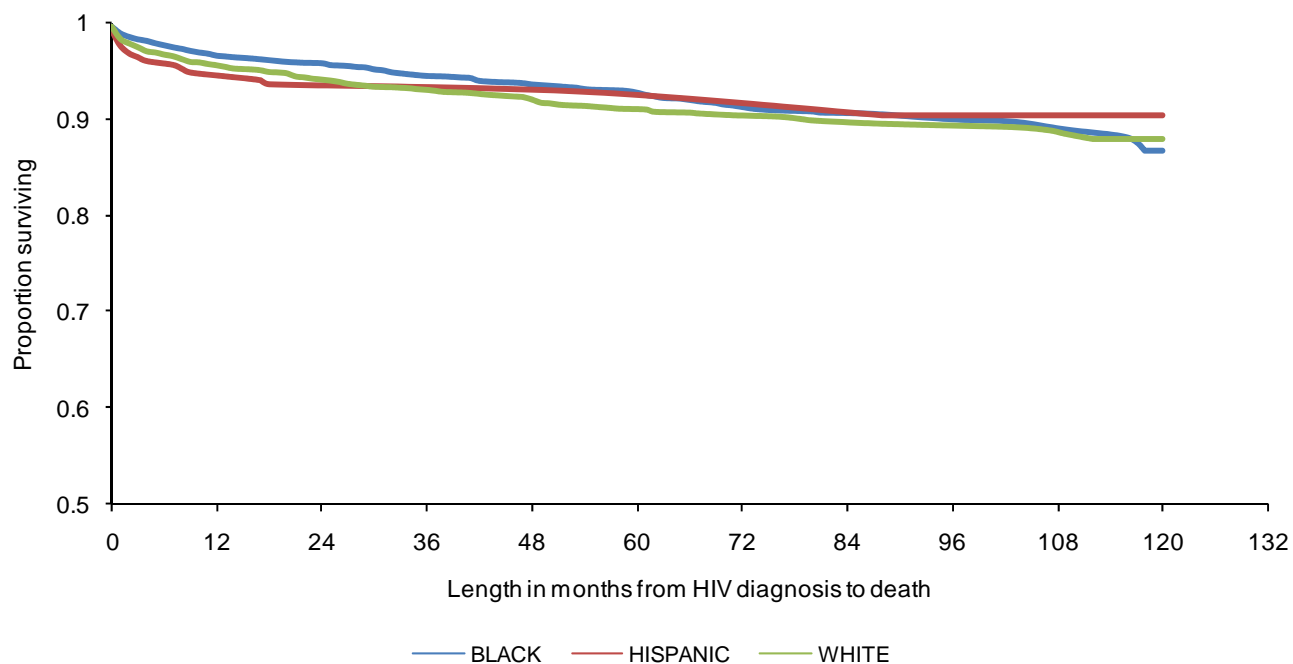
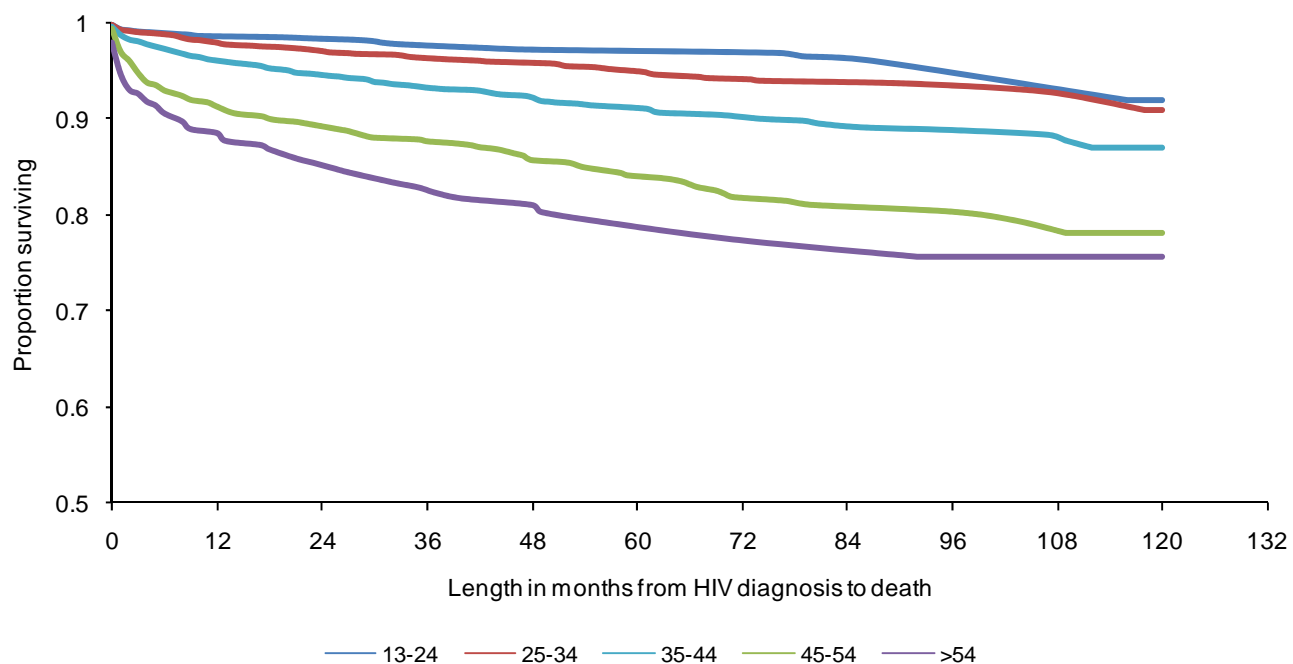
**Figure 13. Length of time between HIV and AIDS diagnosis, by HIV region\*, Missouri, 1999-2007**



\*Outstate includes the North Central, Northwest, Southeast, and Southwest HIV regions

A greater proportion of IDU progressed from HIV to AIDS within 12 months of their HIV diagnosis compared to individuals from all other exposure categories (Figure 12). Around 96 months after the initial HIV diagnosis, the proportion of cases that progressed to AIDS was similar for IDU and MSM/IDU.

There were differences in the progression from HIV to AIDS by HIV region (Figure 13). The proportion of individuals that progressed to AIDS over time was greater for the Kansas City HIV region and all Outstate HIV regions combined compared to the St. Louis HIV region. Differences observed among the regions may be attributed in part to differences in the routine monitoring and reporting of CD4 counts and other active surveillance techniques.

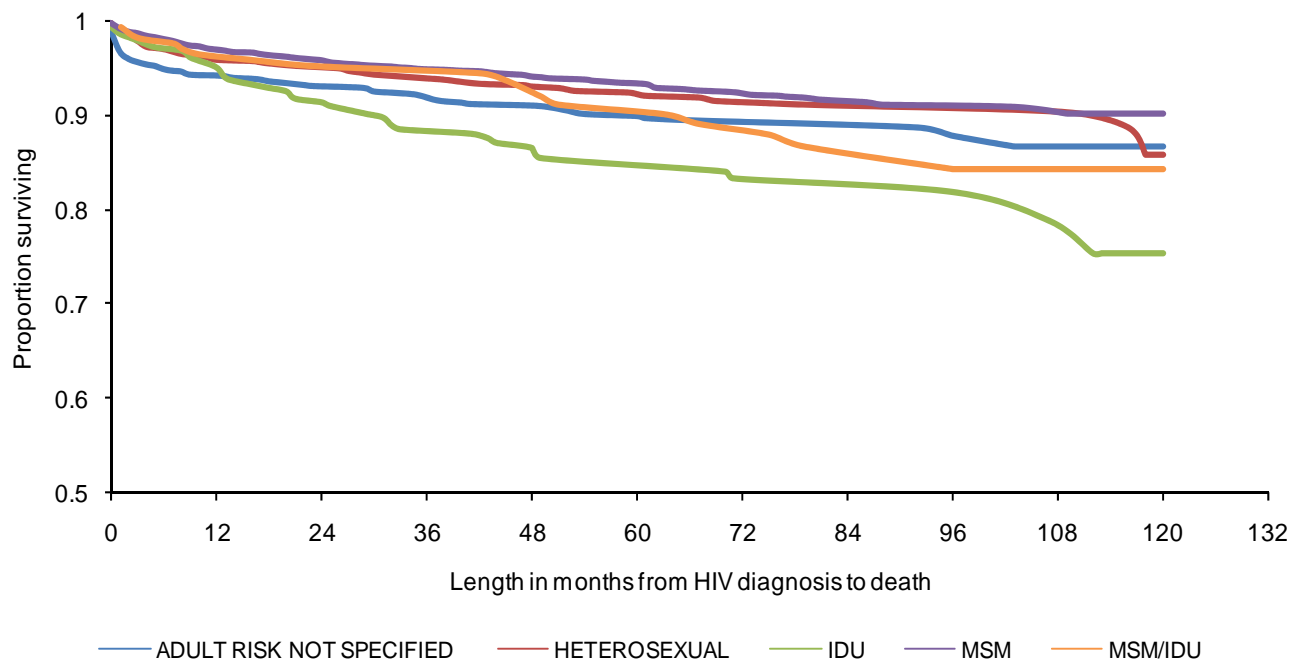
**Figure 14. Length of time between HIV diagnosis and death, by race/ethnicity, Missouri, 1999-2007****Figure 15. Length of time between HIV diagnosis and death, by age at diagnosis\*, Missouri, 1999-2007**

\*Age at earliest diagnosis of HIV disease, regardless of disease progression.

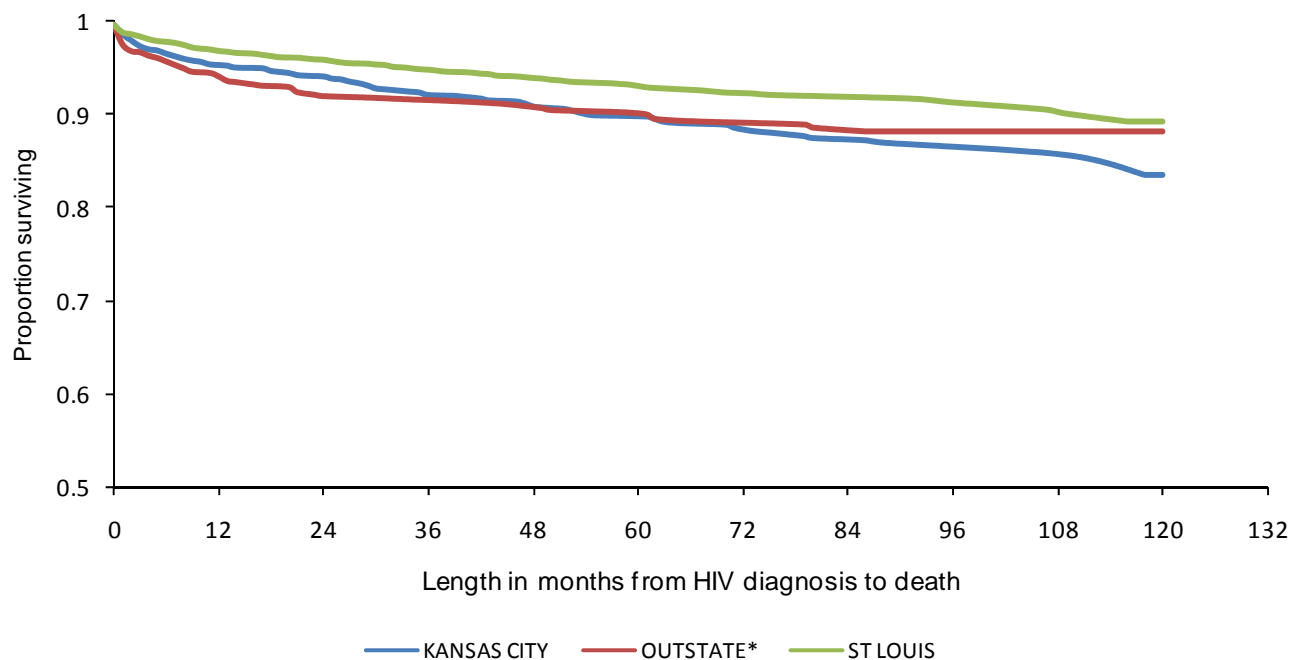
The length of time between the initial HIV diagnosis and reported death was similar by race/ethnicity (Figure 14). Five years following the initial HIV diagnosis, greater than 90% of all individuals were still living.

There were differences in the length of time between HIV diagnosis and death by the age at HIV diagnosis (Figure 15). Over time, the proportion of cases that were deceased was higher as the age at initial HIV diagnosis increased. For example, 72 months following the initial diagnosis 97% of individuals diagnosed between 13-24 years of age were still living, compared to only 77% if individuals diagnosed at greater than 54 years of age.

**Figure 16. Length of time between HIV diagnosis and death, by mode of transmission, Missouri, 1999-2007**



**Figure 17. Length of time between HIV diagnosis and death, by HIV region\*, Missouri, 1999-2007**



\*Outstate includes the North Central, Northwest, Southeast, and Southwest HIV regions

A greater proportion of IDU and those with no reported risk were deceased within 24 months of their HIV diagnosis compared to individuals from all other exposure categories (Figure 16). Differences in survival persisted over time.

There were slight differences in survival following HIV diagnosis by HIV region (Figure 17). At 24 months following the initial HIV diagnosis, the proportion still living was 96%, 94%, and 92% for the St. Louis HIV region, Kansas City HIV region, and all other Outstate HIV regions combined. Differences in survival among the regions increased over time.

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## Key Highlights: What are the indicators of HIV/AIDS infection risk in Missouri?

### Primary and Secondary (P&S) Syphilis

- The number of reported P&S syphilis cases decreased from 239 cases in 2007 to 224 cases in 2008. The decrease observed was due to a decline in reported cases from the Kansas City HIV region.
- The rate of reported cases was highest in St. Louis City (17 per 100,000).
- Blacks were disproportionately impacted, with a case rate 5.7 times greater than whites.
- Although the median age at diagnosis of P&S syphilis remains higher than chlamydia or gonorrhea, it has decreased over time. In 2003, the median age at P&S syphilis diagnosis was 40 years old, compared to 30 years old in 2008.

### Early Latent Syphilis

- The number of early latent syphilis cases increased from 2007 (120 cases) to 2008 (145 cases). Similar trends were observed in all regions of the state, except for the Kansas City HIV region, where the number of early latent syphilis cases reported decreased from 2007 (51 cases) to 2008 (49 cases).
- The rate of reported cases in 2008 was highest in St. Louis City (11 per 100,000).
- Males represented the majority (74%) of reported early latent syphilis cases.
- The case rate was 6.1 times higher among blacks than whites.

### Gonorrhea

- The number of reported gonorrhea cases decreased from 2007 (9,876) to 2008 (8,014 cases). Similar trends were observed in all regions of the state, except for the Southeast HIV region. In the Southeast HIV region, the number of gonorrhea cases reported from 2007 to 2008 increased by 33% from 339 to 451 cases.
- St. Louis City had the highest rate of reported gonorrhea cases at 539 per 100,000 persons.
- A larger proportion of reported gonorrhea cases were diagnosed between 15 and 19 years of age among black females (37%) compared to white females (29%), black males (21%), and white males (12%).

### Chlamydia

- The number of reported chlamydia cases increased from 23,308 in 2007 to 24,817 in 2008. Similar trends were observed for all regions of the state, except the Northwest HIV region where the number of cases decreased slightly from 687 to 676 between 2007 and 2008.
- St. Louis City had the highest chlamydia rate in 2008 (1,226 per 100,000). Jackson County reported the second highest case rate of chlamydia (835 per 100,000).
- A larger proportion of reported chlamydia cases were diagnosed between 15 and 19 years old among black females (43%), compared to white females (39%), black males (29%), and white males (20%).

### Hepatitis B

- The number of reported Hepatitis B cases increased by two from 2007 (508) to 2008 (510).
- Kansas City had the greatest number of reported Hepatitis B cases with 91 cases.
- Among females, the largest numbers of cases were 20-29 years of age, while among males the largest numbers of cases were 40-49 years old.

### Hepatitis C

- The number of reported Hepatitis C cases in Missouri increased by 455 cases from 2007 (4,468) to 2008 (4,923).
- St. Louis County had the greatest number of reported Hepatitis C cases with 587 cases.
- Among females, the largest numbers of cases were 40-49 years of age, while among males the largest numbers of cases were 50-59 years old.

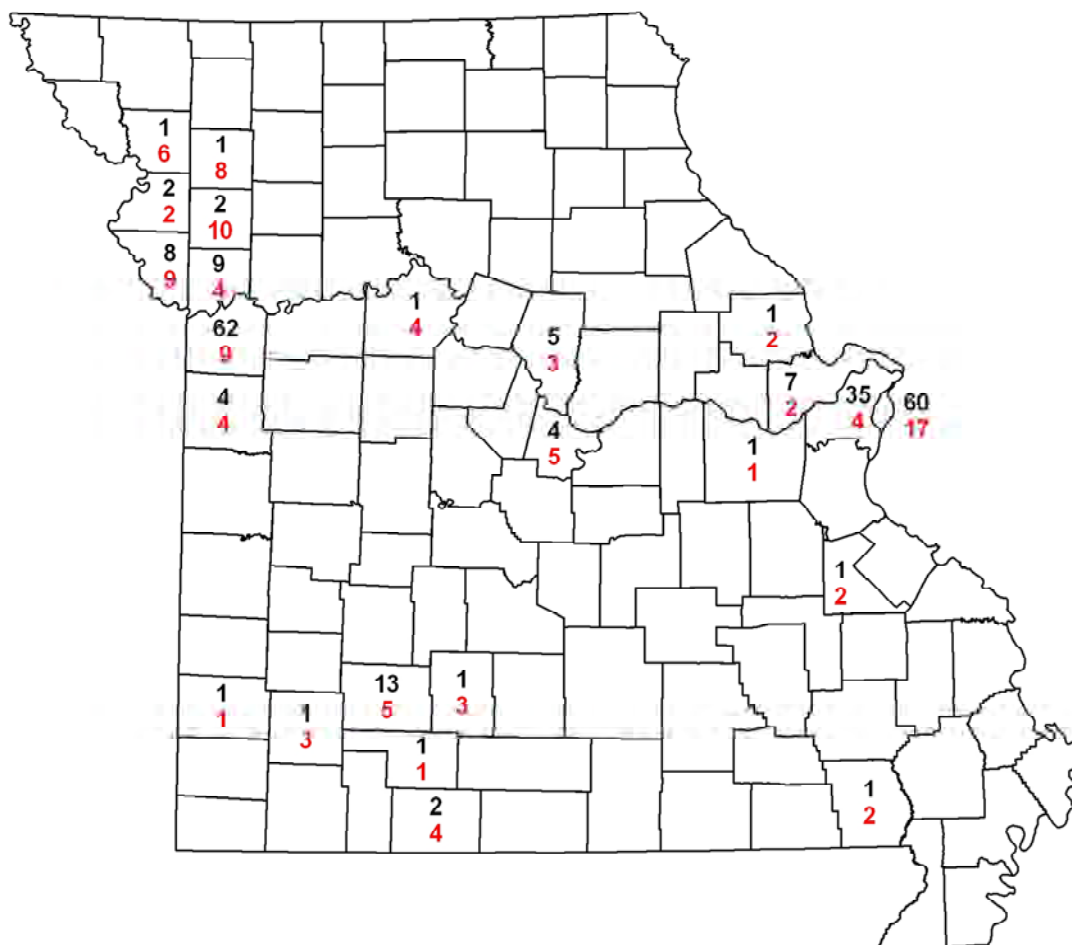
### HIV and STD Co-infections

- There were 270 persons living with HIV who were reported with an STD in 2008.
- Of the 369 early syphilis cases reported in 2008, 30% were among individuals living with HIV. Only 1% of gonorrhea cases and less than 1% of chlamydia cases reported in 2008 were among individuals living with HIV.
- St. Louis residents represented 78% of all living HIV cases reported with chlamydia in 2008, 68% of those with gonorrhea, 65% of those with multiple STD co-morbidities, and 58% of those with early syphilis.
- Although blacks represented only 44% of living HIV disease cases, they represented 63% of individuals diagnosed with an STD co-morbidity.

<b>Table 22. Reported P&amp;S syphilis cases and rates, by race*, by geographic region, by sex, Missouri, 2008</b>								
	<b>Male</b>			<b>Female</b>			<b>Total</b>	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
<b>Missouri</b>								
White	102	52.3%	4.3	12	41.4%	0.5	114	2.3
Black	76	39.0%	23.3	14	48.3%	3.8	90	13.0
Other/Unknown*	17	8.7%	--	3	10.3%	--	20	--
<b>Total Cases</b>	<b>195</b>	<b>100.0%</b>	<b>6.8</b>	<b>29</b>	<b>100.0%</b>	<b>1.0</b>	<b>224</b>	<b>3.8</b>
<b>St. Louis Region</b>								
White	35	38.5%	4.6	4	30.8%	0.5	39	2.5
Black	52	57.1%	27.5	9	69.2%	4.0	61	14.7
Other/Unknown*	4	4.4%	--	0	0.0%	--	4	--
<b>Total Cases</b>	<b>91</b>	<b>100.0%</b>	<b>9.0</b>	<b>13</b>	<b>100.0%</b>	<b>1.2</b>	<b>104</b>	<b>5.0</b>
<b>Kansas City Region</b>								
White	37	53.6%	7.9	6	42.9%	1.2	43	4.5
Black	21	30.4%	25.5	5	35.7%	5.3	26	14.7
Other/Unknown*	11	15.9%	--	3	21.4%	--	14	--
<b>Total Cases</b>	<b>69</b>	<b>100.0%</b>	<b>11.5</b>	<b>14</b>	<b>100.0%</b>	<b>2.2</b>	<b>83</b>	<b>6.8</b>
<b>Northwest Region</b>								
White	4	80.0%	3.6	1	100.0%	0.9	5	2.2
Black	1	20.0%	19.9	0	0.0%	0.0	1	12.7
Other/Unknown*	0	0.0%	--	0	0.0%	--	0	--
<b>Total Cases</b>	<b>5</b>	<b>100.0%</b>	<b>4.1</b>	<b>1</b>	<b>100.0%</b>	<b>0.8</b>	<b>6</b>	<b>2.5</b>
<b>North Central Region</b>								
White	8	80.0%	2.4	0	--	0.0	8	1.2
Black	2	20.0%	9.0	0	--	0.0	2	4.8
Other/Unknown*	0	0.0%	--	0	--	--	0	--
<b>Total Cases</b>	<b>10</b>	<b>100.0%</b>	<b>2.7</b>	<b>0</b>	<b>--</b>	<b>0.0</b>	<b>10</b>	<b>1.4</b>
<b>Southwest Region</b>								
White	16	88.9%	3.2	1	100.0%	0.2	17	1.7
Black	0	0.0%	0.0	0	0.0%	0.0	0	0.0
Other/Unknown*	2	11.1%	--	0	0.0%	--	2	--
<b>Total Cases</b>	<b>18</b>	<b>100.0%</b>	<b>3.3</b>	<b>1</b>	<b>100.0%</b>	<b>0.2</b>	<b>19</b>	<b>1.7</b>
<b>Southeast Region</b>								
White	2	100.0%	0.9	0	--	0.0	2	0.4
Black	0	0.0%	0.0	0	--	0.0	0	0.0
Other/Unknown*	0	0.0%	--	0	--	--	0	--
<b>Total Cases</b>	<b>2</b>	<b>100.0%</b>	<b>0.8</b>	<b>0</b>	<b>--</b>	<b>0.0</b>	<b>2</b>	<b>0.4</b>
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2007 MDHSS population estimates.								

There were a total of 224 primary and secondary (P&S) syphilis cases reported in 2008. The majority of cases (87%) were reported among males. Males represented a smaller proportion of the reported cases in the Kansas City HIV region (83%) than in the St. Louis HIV region (88%). The rate of P&S syphilis cases among males was highest in the Kansas City HIV region (11.5), followed by the St. Louis HIV region (9.0). Forty-six percent of all P&S syphilis cases were reported in the St. Louis HIV region and 37% were reported in the Kansas City HIV region. The Southwest HIV region had the third largest number of P&S syphilis cases reported. The rate of reported P&S syphilis cases was higher for blacks compared to whites in all regions that reported P&S syphilis cases among blacks.

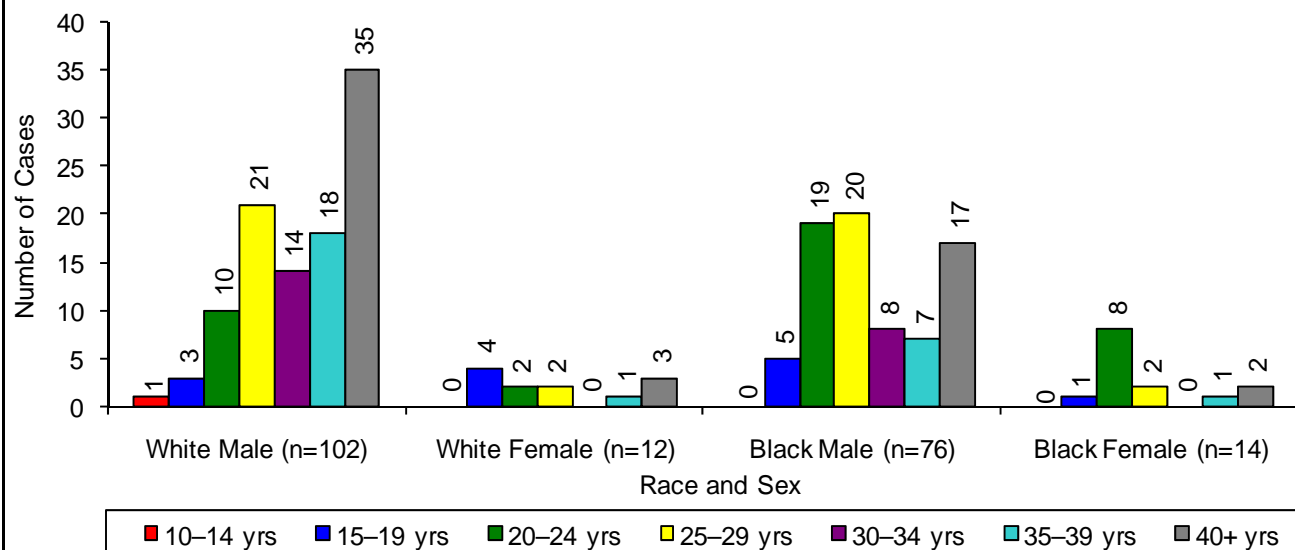
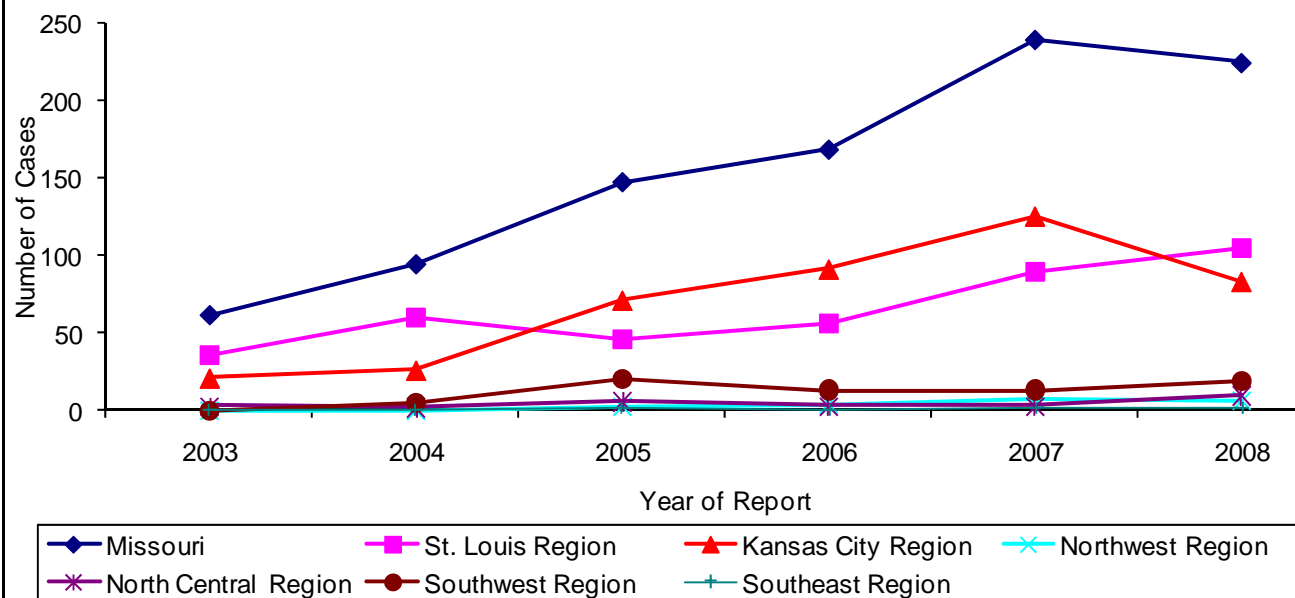
**Figure 18. Reported P&S syphilis cases\* and rates\*\*, by county, Missouri, 2008**



\*Case counts are in black.

\*\*Case rates are in red, per 100,000 population based on 2007 MDHSS population estimates.

P&S syphilis cases were concentrated in metropolitan areas (Figure 18). There were 91 counties that did not report any P&S syphilis cases in 2008. St. Louis City had the highest rate of reported P&S syphilis cases at 17 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 17 reported with P&S syphilis in 2008.

**Figure 19. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Missouri, 2008****Figure 20. Reported P&S syphilis cases by geographic region and year of report, Missouri, 2003-2008**

The largest numbers of P&S syphilis cases were reported among white males (102) and black males (76) (Figure 19). The number of reported cases increased from 2007 to 2008 among white males (78 to 102), decreased among black males (119 to 76), and remained the same among white and black females. There were differences in the distribution of reported cases by age at diagnosis among the race and sex categories. Among white males, the largest number of cases was reported among individuals 40 or more years of age at the time of diagnosis. Among black males the largest number of cases was reported among 25-29 year olds, followed by individuals 20-24 years of age.

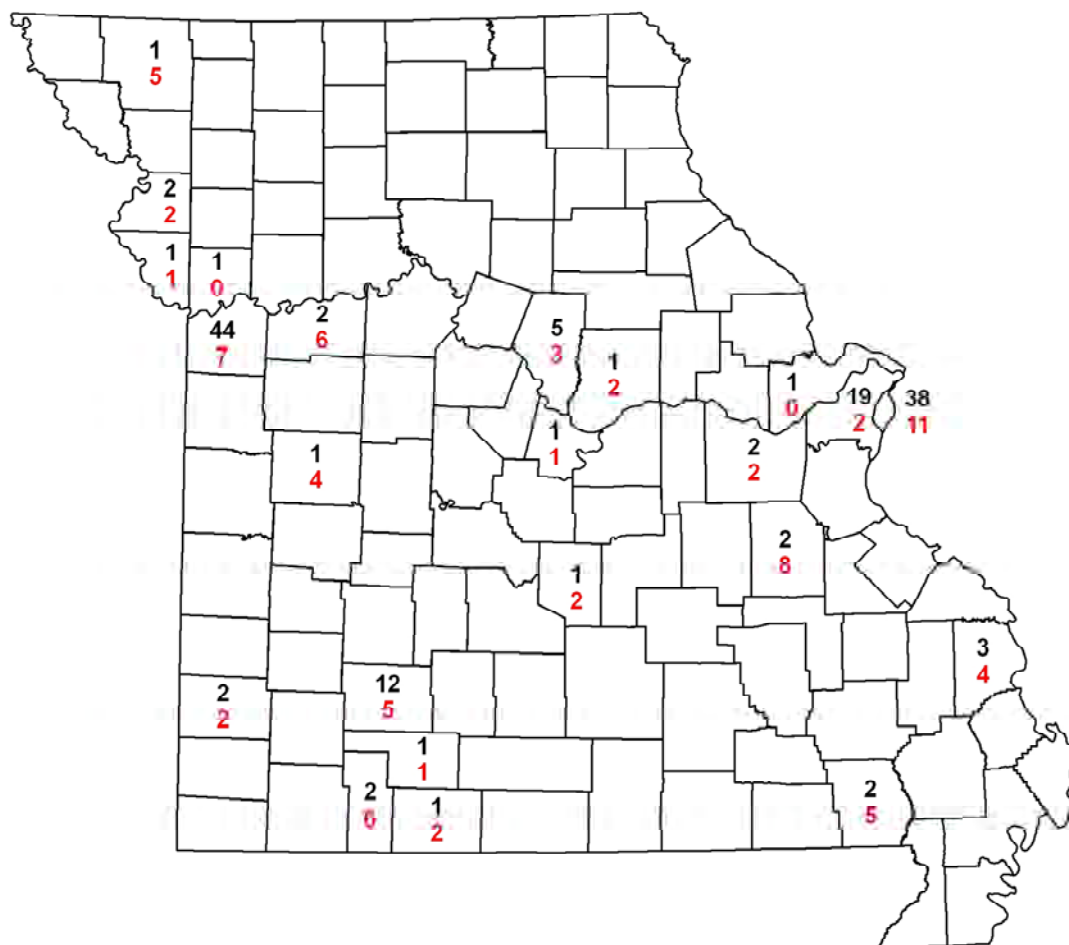
The number of reported P&S syphilis cases in Missouri increased from 2003 to 2007 and then decreased in 2008 (Figure 20). Similar trends were observed in the Kansas City HIV region. The number of reported P&S syphilis cases was higher in 2008 than 2007 in the St. Louis, Southwest, and North Central HIV regions. The number of reported cases remained approximately the same from 2007 to 2008 in the Northwest and Southeast HIV regions.

**Table 23. Reported early latent syphilis cases and rates, by race\*, by geographic region, by sex, Missouri, 2008**

	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
<b>Missouri</b>								
White	56	51.9%	2.3	15	40.5%	0.6	71	1.5
Black	47	43.5%	14.4	17	45.9%	4.6	64	9.2
Other/Unknown*	5	4.6%	--	5	13.5%	--	10	--
<b>Total Cases</b>	<b>108</b>	<b>100.0%</b>	<b>3.8</b>	<b>37</b>	<b>100.0%</b>	<b>1.2</b>	<b>145</b>	<b>2.5</b>
<b>St. Louis Region</b>								
White	18	36.0%	2.3	2	20.0%	0.2	20	1.3
Black	30	60.0%	15.8	8	80.0%	3.5	38	9.2
Other/Unknown*	2	4.0%	--	0	0.0%	--	2	--
<b>Total Cases</b>	<b>50</b>	<b>100.0%</b>	<b>5.0</b>	<b>10</b>	<b>100.0%</b>	<b>0.9</b>	<b>60</b>	<b>2.9</b>
<b>Kansas City Region</b>								
White	13	43.3%	2.8	7	36.8%	1.4	20	2.1
Black	14	46.7%	17.0	7	36.8%	7.4	21	11.9
Other/Unknown*	3	10.0%	--	5	26.3%	--	8	--
<b>Total Cases</b>	<b>30</b>	<b>100.0%</b>	<b>5.0</b>	<b>19</b>	<b>100.0%</b>	<b>3.0</b>	<b>49</b>	<b>4.0</b>
<b>Northwest Region</b>								
White	2	100.0%	1.8	1	100.0%	0.9	3	1.3
Black	0	0.0%	0.0	0	0.0%	0.0	0	0.0
Other/Unknown*	0	0.0%	--	0	0.0%	--	0	--
<b>Total Cases</b>	<b>2</b>	<b>100.0%</b>	<b>1.7</b>	<b>1</b>	<b>100.0%</b>	<b>0.8</b>	<b>3</b>	<b>1.2</b>
<b>North Central Region</b>								
White	6	100.0%	1.8	0	0.0%	0.0	6	0.9
Black	0	0.0%	0.0	1	100.0%	5.3	1	2.4
Other/Unknown*	0	0.0%	--	0	0.0%	--	0	--
<b>Total Cases</b>	<b>6</b>	<b>100.0%</b>	<b>1.6</b>	<b>1</b>	<b>100.0%</b>	<b>0.3</b>	<b>7</b>	<b>0.9</b>
<b>Southwest Region</b>								
White	14	87.5%	2.8	3	100.0%	0.6	17	1.7
Black	2	12.5%	16.8	0	0.0%	0.0	2	9.2
Other/Unknown*	0	0.0%	--	0	0.0%	--	0	--
<b>Total Cases</b>	<b>16</b>	<b>100.0%</b>	<b>3.0</b>	<b>3</b>	<b>100.0%</b>	<b>0.5</b>	<b>19</b>	<b>1.7</b>
<b>Southeast Region</b>								
White	3	75.0%	1.4	2	66.7%	0.9	5	1.1
Black	1	25.0%	6.7	1	33.3%	6.9	2	6.8
Other/Unknown*	0	0.0%	--	0	0.0%	--	0	--
<b>Total Cases</b>	<b>4</b>	<b>100.0%</b>	<b>1.7</b>	<b>3</b>	<b>100.0%</b>	<b>1.2</b>	<b>7</b>	<b>1.4</b>
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2007 MDHSS population estimates.								

There were a total of 145 early latent syphilis cases reported in 2008. The majority of cases (74%) were reported among males. Males represented a smaller proportion of the reported cases in the Kansas City HIV region (61%) than in the St. Louis HIV region (83%). The rate of early latent syphilis cases among all cases was highest in the Kansas City HIV region (4.0), followed by the St. Louis HIV region (2.9). Forty-one percent of all early latent syphilis cases were reported in the St. Louis HIV region and 34% were reported in the Kansas City HIV region. The Southwest HIV region had the third largest number of early latent syphilis cases reported. The rate of reported early latent syphilis cases was higher for blacks compared to whites in all regions that reported cases among blacks.

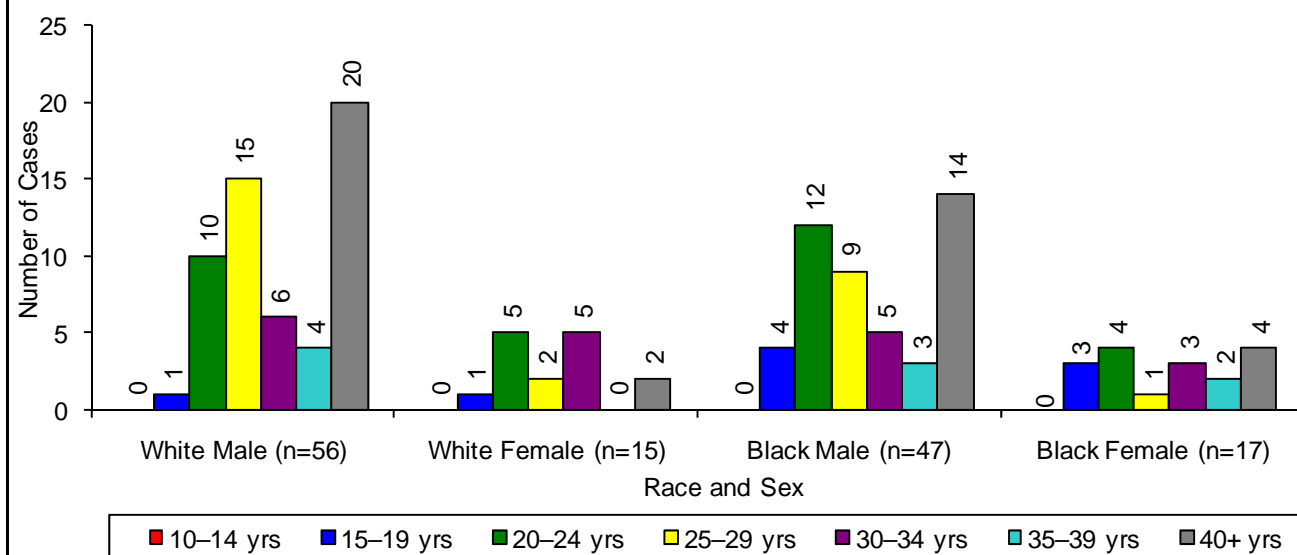
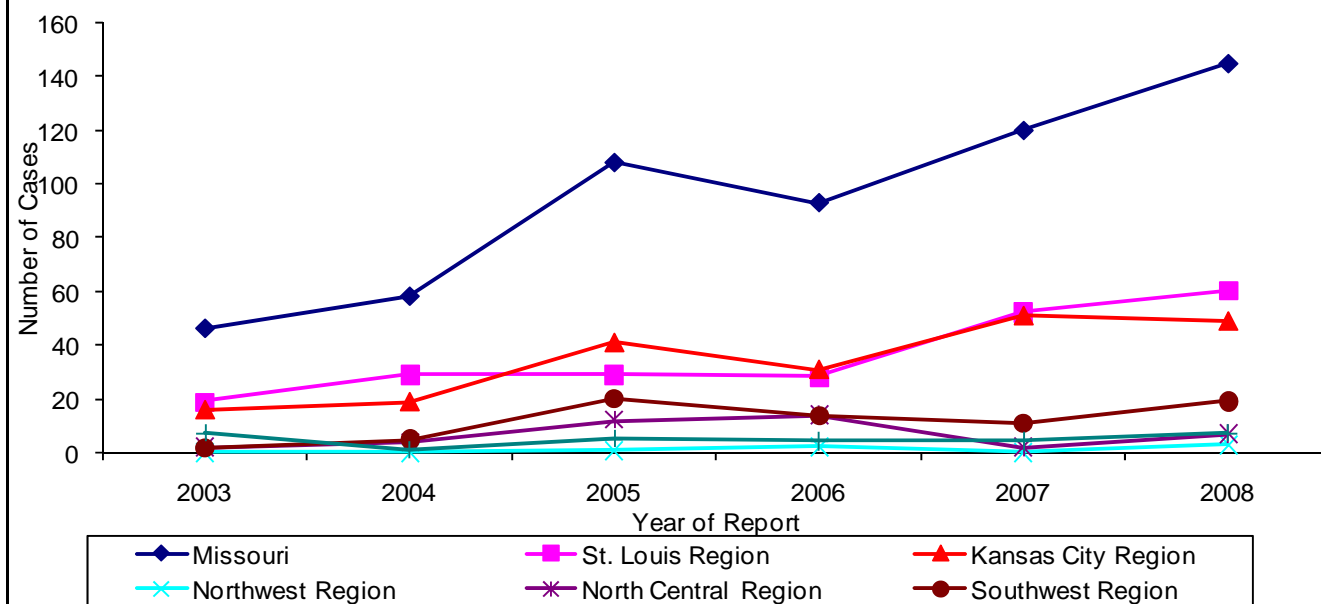
**Figure 21. Reported early latent syphilis cases\* and rates\*\*, by county, Missouri, 2008**



\*Case counts are in black.

\*\*Case rates are in red, per 100,000 population based on 2007 MDHSS population estimates.

Early latent syphilis cases were concentrated in metropolitan areas (Figure 21). There were 92 counties that did not report any early latent syphilis cases in 2008. St. Louis City had the highest rate of reported early latent syphilis cases at 11 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 11 reported with early latent syphilis in 2008.

**Figure 22. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Missouri, 2008****Figure 23. Reported early latent syphilis cases by geographic region and year of report, Missouri, 2003-2008**

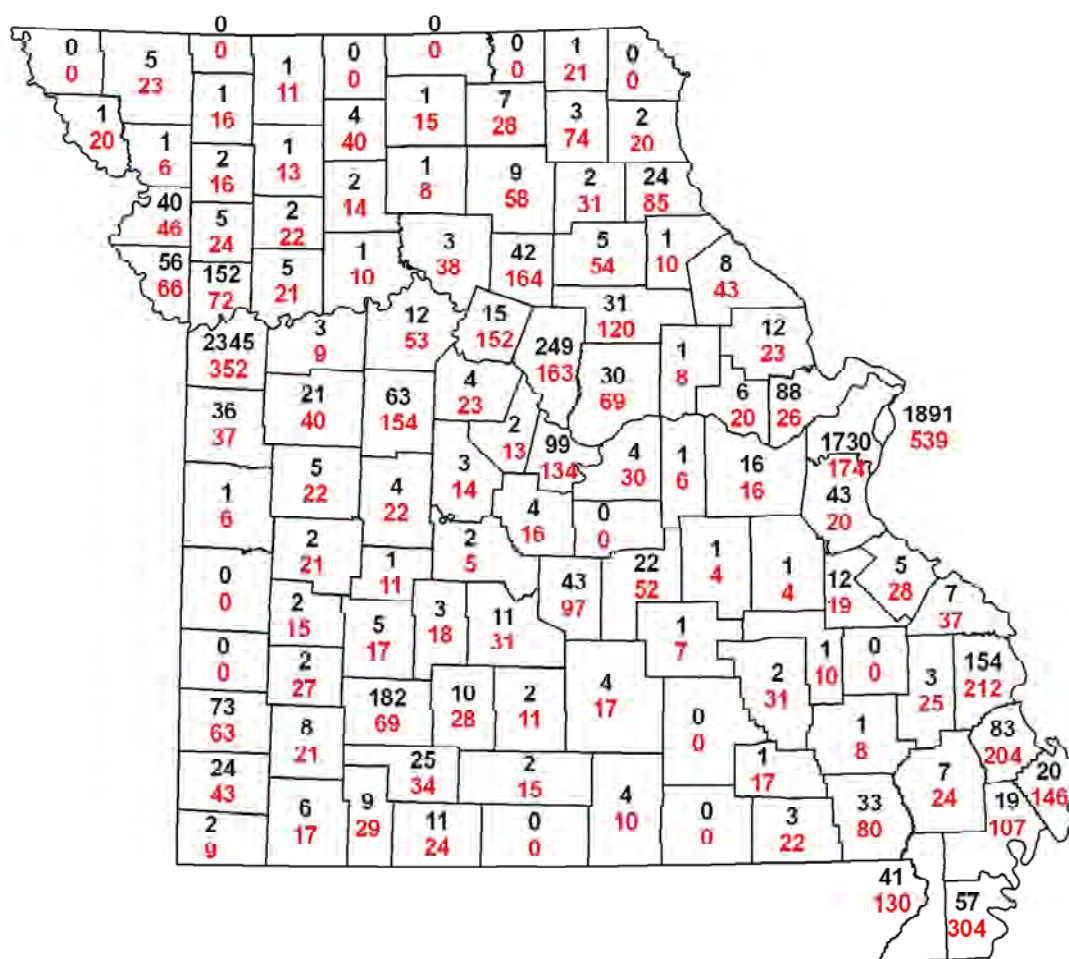
The largest numbers of early latent syphilis cases were reported among white males (56) and black males (47) (Figure 22). The number of reported cases increased from 2007 to 2008 among white males (38 to 56), white females (9 to 15) and black females (15 to 17), and remained the same among black males. Among both white and black males, the largest number of cases was reported among individuals 40 or more years of age at the time of diagnosis. Among white females, the largest number of cases was equally divided between individuals 20-24 and 30-34 years of age. The distribution of reported early latent syphilis cases by age at diagnosis was more evenly distributed among black females.

The number of reported early latent syphilis cases in Missouri increased from 2003 to 2008 (Figure 23). Similar trends were observed in the St. Louis HIV region. The number of reported early latent syphilis cases generally increased from 2003 to 2007 in the Kansas City HIV region, and then decreased in 2008. In the remaining HIV regions, the number of reported early latent syphilis remained relatively stable, with slight fluctuations, between 2003 and 2008.

<b>Table 24. Reported gonorrhea cases and rates, by race*, by geographic region, by sex, Missouri, 2008</b>								
	<b>Male</b>			<b>Female</b>			<b>Total</b>	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
<b>Missouri</b>								
White	356	10.3%	14.9	1,052	23.2%	42.2	1,408	28.8
Black	2,567	73.9%	787.8	2,630	57.9%	717.2	5,197	750.4
Other/Unknown*	549	15.8%	--	860	18.9%	--	1,409	--
<b>Total Cases</b>	<b>3,472</b>	<b>100.0%</b>	<b>120.9</b>	<b>4,542</b>	<b>100.0%</b>	<b>151.0</b>	<b>8,014</b>	<b>136.3</b>
<b>St. Louis Region</b>								
White	86	4.9%	11.2	163	8.0%	20.3	249	15.8
Black	1,361	77.9%	718.5	1,391	68.2%	615.8	2,752	662.7
Other/Unknown*	300	17.2%	--	485	23.8%	--	785	--
<b>Total Cases</b>	<b>1,747</b>	<b>100.0%</b>	<b>173.4</b>	<b>2,039</b>	<b>100.0%</b>	<b>188.7</b>	<b>3,786</b>	<b>181.3</b>
<b>Kansas City Region</b>								
White	105	9.3%	22.5	308	20.5%	63.4	413	43.4
Black	887	78.6%	1076.9	987	65.8%	1042.7	1,874	1058.6
Other/Unknown*	137	12.1%	--	204	13.6%	--	341	--
<b>Total Cases</b>	<b>1,129</b>	<b>100.0%</b>	<b>188.5</b>	<b>1,499</b>	<b>100.0%</b>	<b>238.7</b>	<b>2,628</b>	<b>214.2</b>
<b>Northwest Region</b>								
White	7	31.8%	6.3	29	65.9%	25.3	36	15.9
Black	9	40.9%	179.1	8	18.2%	279.9	17	215.7
Other/Unknown*	6	27.3%	--	7	15.9%	--	13	--
<b>Total Cases</b>	<b>22</b>	<b>100.0%</b>	<b>18.2</b>	<b>44</b>	<b>100.0%</b>	<b>36.3</b>	<b>66</b>	<b>27.3</b>
<b>North Central Region</b>								
White	58	24.6%	17.7	224	57.0%	65.9	282	42.2
Black	142	60.2%	637.0	122	31.0%	643.3	264	639.9
Other/Unknown*	36	15.3%	--	47	12.0%	--	83	--
<b>Total Cases</b>	<b>236</b>	<b>100.0%</b>	<b>64.6</b>	<b>393</b>	<b>100.0%</b>	<b>105.5</b>	<b>629</b>	<b>85.2</b>
<b>Southwest Region</b>								
White	66	44.0%	13.3	208	68.4%	40.0	274	27.0
Black	48	32.0%	402.9	21	6.9%	214.9	69	318.1
Other/Unknown*	36	24.0%	--	75	24.7%	--	111	--
<b>Total Cases</b>	<b>150</b>	<b>100.0%</b>	<b>27.8</b>	<b>304</b>	<b>100.0%</b>	<b>54.5</b>	<b>454</b>	<b>41.4</b>
<b>Southeast Region</b>								
White	34	18.1%	15.6	120	45.6%	52.8	154	34.5
Black	120	63.8%	809.6	101	38.4%	693.9	221	752.3
Other/Unknown*	34	18.1%	--	42	16.0%	--	76	--
<b>Total Cases</b>	<b>188</b>	<b>100.0%</b>	<b>78.5</b>	<b>263</b>	<b>100.0%</b>	<b>106.2</b>	<b>451</b>	<b>92.6</b>
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2007 MDHSS population estimates.								

There were a total of 8,014 gonorrhea cases reported in 2008. The majority of cases (57%) were reported among females. The proportion of gonorrhea cases reported among females varied by HIV region. The St. Louis HIV region reported the lowest proportion of female cases (54%), followed by the Kansas City (57%), Southeast (58%), North Central (62%), Northwest (67%) and Southwest (67%) HIV regions. The rate of gonorrhea cases among females was highest in the Kansas City HIV region (238.7), followed by the St. Louis HIV region (188.7). Forty-seven percent of all gonorrhea cases were reported in the St. Louis HIV region and 33% were reported in the Kansas City HIV region. The North Central HIV region had the third largest number of gonorrhea cases reported. The rate of reported gonorrhea cases was higher for blacks compared to whites in all regions.

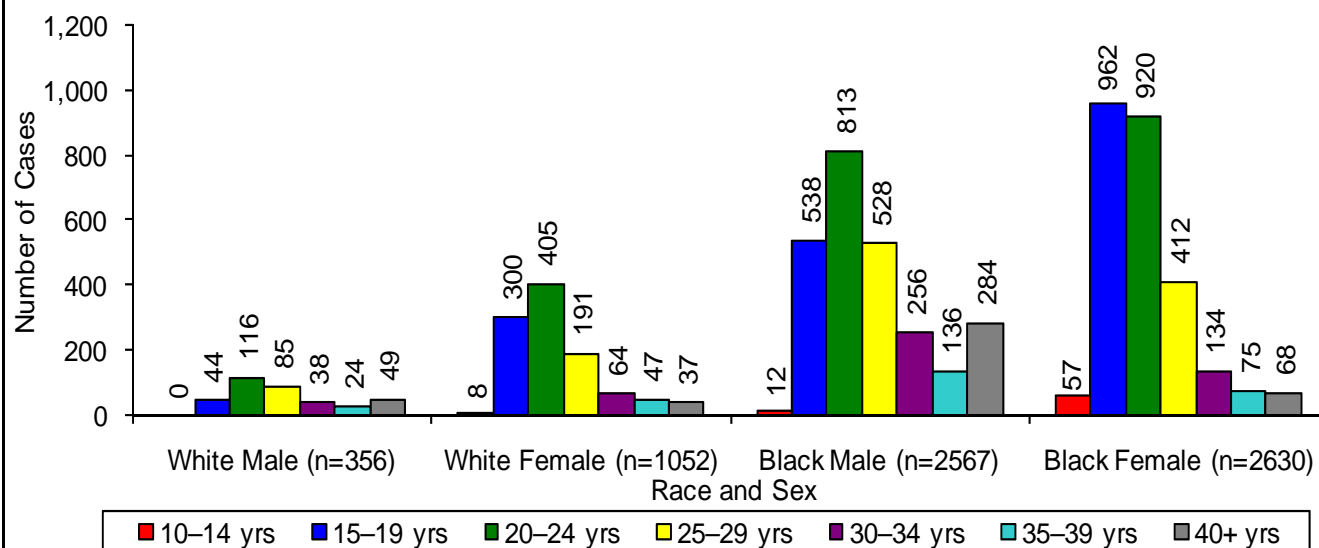
**Figure 24. Reported gonorrhea cases\* and rates\*\*, by county, Missouri, 2008**



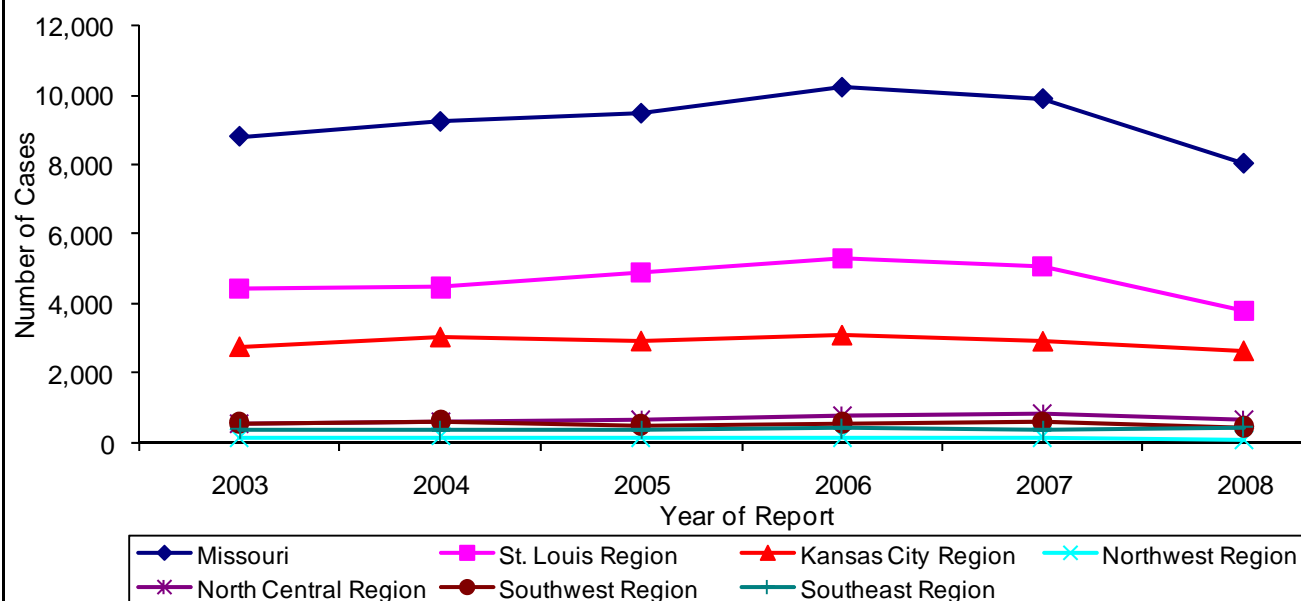
\*Case counts are in black.

\*\*Case rates are in red, per 100,000 population based on 2007 MDHSS population estimates.

Gonorrhea cases reported in St. Louis City, St. Louis County, and Jackson County represented 74% of all reported cases in 2008 (Figure 24). There were 13 counties that did not report any gonorrhea cases in 2008. St. Louis City had the highest rate of reported gonorrhea cases at 539 per 100,000 persons. This means that for every 100,000 persons living in St. Louis City, there were 539 reported with gonorrhea in 2008.

**Figure 25. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Missouri, 2008**

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

**Figure 26. Reported gonorrhea cases by geographic region and year of report, Missouri, 2003-2008**

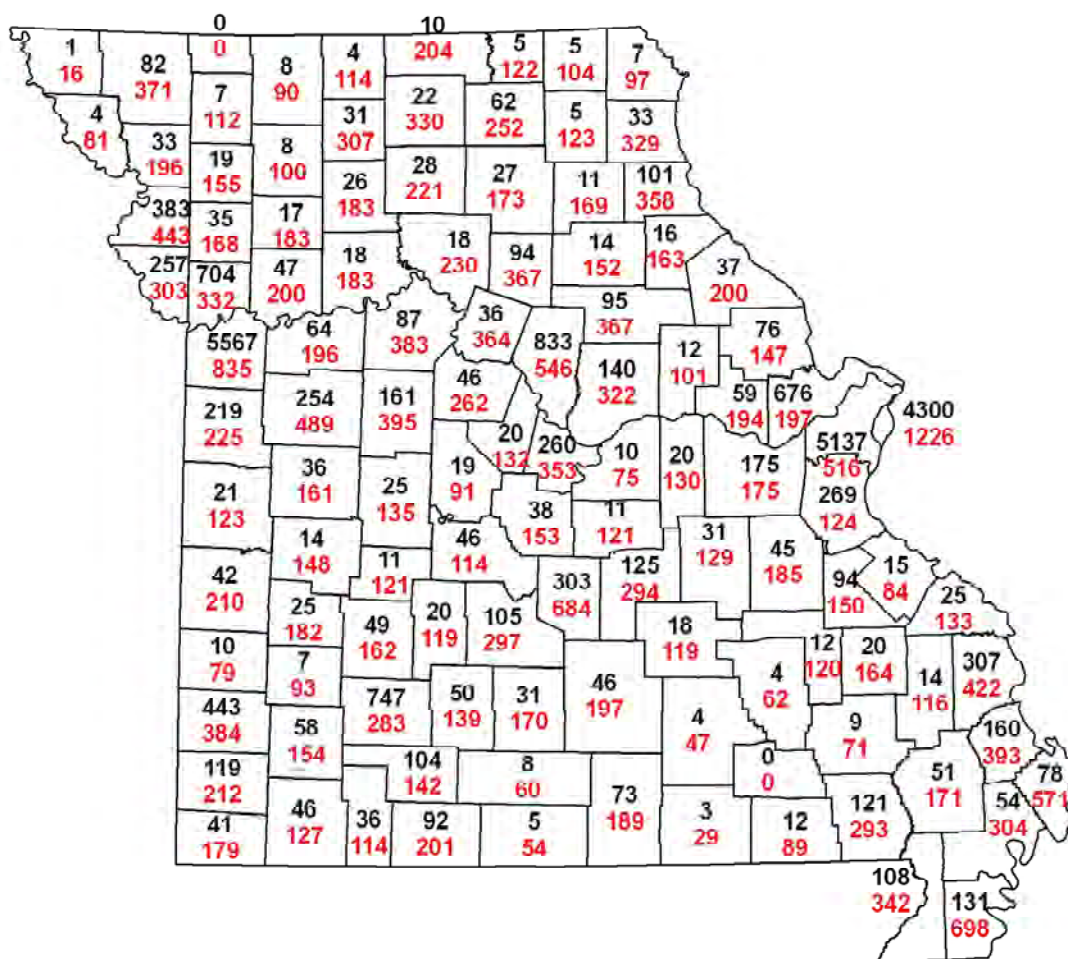
The largest numbers of gonorrhea cases were reported among black females (2,630) and black males (2,567) (Figure 25). The number of reported cases decreased from 2007 to 2008 among all race/ethnicity and sex categories presented. Among white and black males and white females, the largest number of cases was reported among individuals 20-24 years of age at the time of diagnosis. Among black females, the largest number of cases was reported among 15-19 year olds, followed closely by 20-24 year olds. A greater proportion of gonorrhea cases among black males were diagnosed among individuals 40 or more years of age (11%) compared to the other race/ethnicity and sex categories presented.

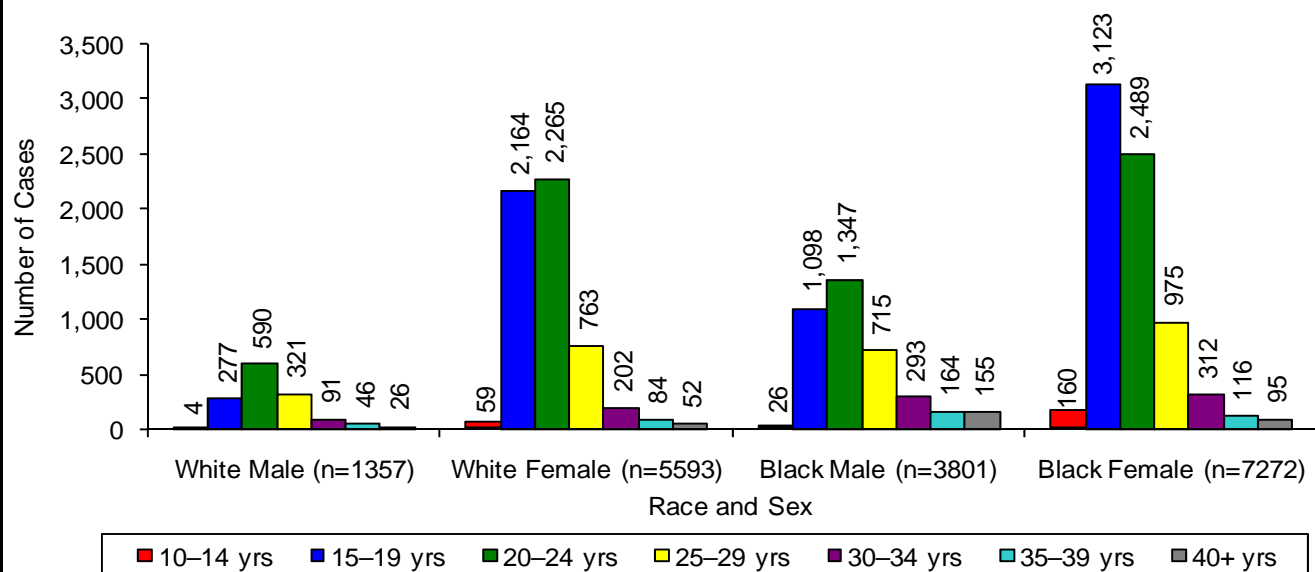
The number of reported gonorrhea cases in Missouri increased from 2003 to 2006 and then decreased through 2008 (Figure 26). The decrease observed may be due to the increased use of injectable antibiotics in recent years, which ensures patients receive treatment. The change to a new class of antibiotics, to which gonorrhea is not known to be resistant, may also explain the observed decrease. The number of reported gonorrhea cases was lower in 2008 compared to 2003 in the Kansas City, St. Louis, Northwest, and Southwest HIV regions. In the North Central HIV region, the number of reported gonorrhea cases in 2008 (629) was higher than in 2003 (537). However, the number of reported cases in 2008 was lower in the North Central HIV region than in 2007. The Southeast HIV region was the only region where the number of reported gonorrhea cases increased from 2007 to 2008 (339 to 451).

**Table 25. Reported chlamydia cases and rates, by race\*, by geographic region, by sex, Missouri, 2008**

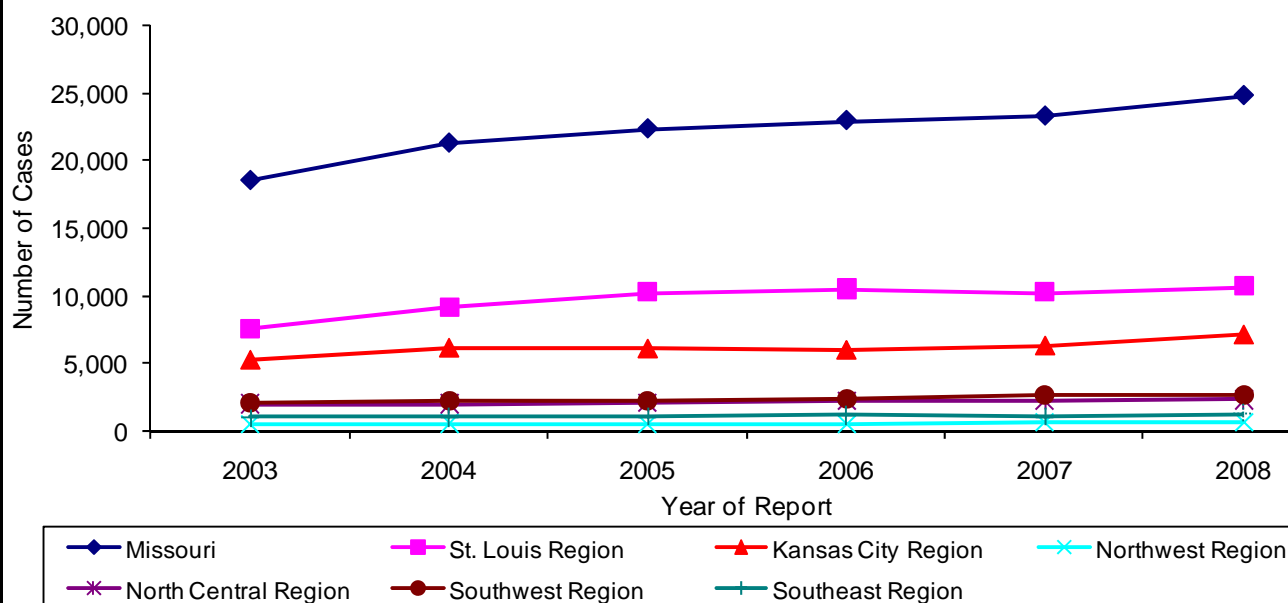
	Male			Female			Total	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
<b>Missouri</b>								
White	1,357	20.3%	56.8	5,593	30.9%	224.4	6,950	142.4
Black	3,801	56.7%	1166.5	7,272	40.1%	1983.2	11,073	1598.9
Other/Unknown*	1,543	23.0%	--	5,251	29.0%	--	6,794	--
<b>Total Cases</b>	<b>6,701</b>	<b>100.0%</b>	<b>233.4</b>	<b>18,116</b>	<b>100.0%</b>	<b>602.4</b>	<b>24,817</b>	<b>422.2</b>
<b>St. Louis Region</b>								
White	293	9.5%	38.1	901	11.9%	112.0	1,194	75.9
Black	2,038	66.0%	1075.9	4,009	52.7%	1774.9	6,047	1456.1
Other/Unknown*	759	24.6%	--	2,692	35.4%	--	3,451	--
<b>Total Cases</b>	<b>3,090</b>	<b>100.0%</b>	<b>306.7</b>	<b>7,602</b>	<b>100.0%</b>	<b>703.6</b>	<b>10,692</b>	<b>512.1</b>
<b>Kansas City Region</b>								
White	351	17.1%	75.3	1,389	27.0%	285.9	1,740	182.8
Black	1,285	62.7%	1560.1	2,398	46.6%	2533.3	3,683	2080.5
Other/Unknown*	414	20.2%	--	1,357	26.4%	--	1,771	--
<b>Total Cases</b>	<b>2,050</b>	<b>100.0%</b>	<b>342.4</b>	<b>5,144</b>	<b>100.0%</b>	<b>819.0</b>	<b>7,194</b>	<b>586.4</b>
<b>Northwest Region</b>								
White	90	52.6%	80.5	353	69.9%	307.7	443	195.6
Black	40	23.4%	796.2	62	12.3%	2169.3	102	1294.1
Other/Unknown*	41	24.0%	--	90	17.8%	--	131	--
<b>Total Cases</b>	<b>171</b>	<b>100.0%</b>	<b>141.7</b>	<b>505</b>	<b>100.0%</b>	<b>416.9</b>	<b>676</b>	<b>279.6</b>
<b>North Central Region</b>								
White	248	41.7%	75.6	1,032	59.5%	303.5	1,280	191.6
Black	233	39.2%	1045.2	384	22.1%	2024.9	617	1495.5
Other/Unknown*	114	19.2%	--	318	18.3%	--	432	--
<b>Total Cases</b>	<b>595</b>	<b>100.0%</b>	<b>162.8</b>	<b>1,734</b>	<b>100.0%</b>	<b>465.5</b>	<b>2,329</b>	<b>315.6</b>
<b>Southwest Region</b>								
White	290	55.7%	58.4	1,433	67.8%	275.7	1,723	169.5
Black	82	15.7%	688.2	122	5.8%	1248.2	204	940.6
Other/Unknown*	149	28.6%	--	559	26.4%	--	708	--
<b>Total Cases</b>	<b>521</b>	<b>100.0%</b>	<b>96.7</b>	<b>2,114</b>	<b>100.0%</b>	<b>379.0</b>	<b>2,635</b>	<b>240.3</b>
<b>Southeast Region</b>								
White	85	31.0%	38.9	485	47.7%	213.3	570	127.8
Black	123	44.9%	829.8	297	29.2%	2040.5	420	1429.6
Other/Unknown*	66	24.1%	--	235	23.1%	--	301	--
<b>Total Cases</b>	<b>274</b>	<b>100.0%</b>	<b>114.4</b>	<b>1,017</b>	<b>100.0%</b>	<b>410.8</b>	<b>1,291</b>	<b>265.0</b>
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2007 MDHSS population estimates.								

There were a total of 24,817 chlamydia cases reported in 2008. The majority of cases (73%) were reported among females. The proportion of chlamydia cases reported among females varied by HIV region. The Southwest HIV region reported the highest proportion of female cases (80%), followed by the Southeast (79%), Northwest (75%), North Central (74%), Kansas City (72%) and St. Louis (71%) HIV regions. The rate of chlamydia cases among females was highest in the Kansas City HIV region (819.0), followed by the St. Louis HIV region (703.6). Forty-three percent of all chlamydia cases were reported in the St. Louis HIV region and 29% were reported in the Kansas City HIV region. The Southwest HIV region had the third largest number of chlamydia cases reported. The rate of reported chlamydia cases was higher for blacks compared to whites in all regions.

**Figure 27. Reported chlamydia cases\* and rates\*\*, by county, Missouri, 2008**

**Figure 28. Reported chlamydia cases, by race and sex, by age group at diagnosis, Missouri, 2008**

Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

**Figure 29. Reported chlamydia cases by geographic region and year of report, Missouri, 2003-2008**

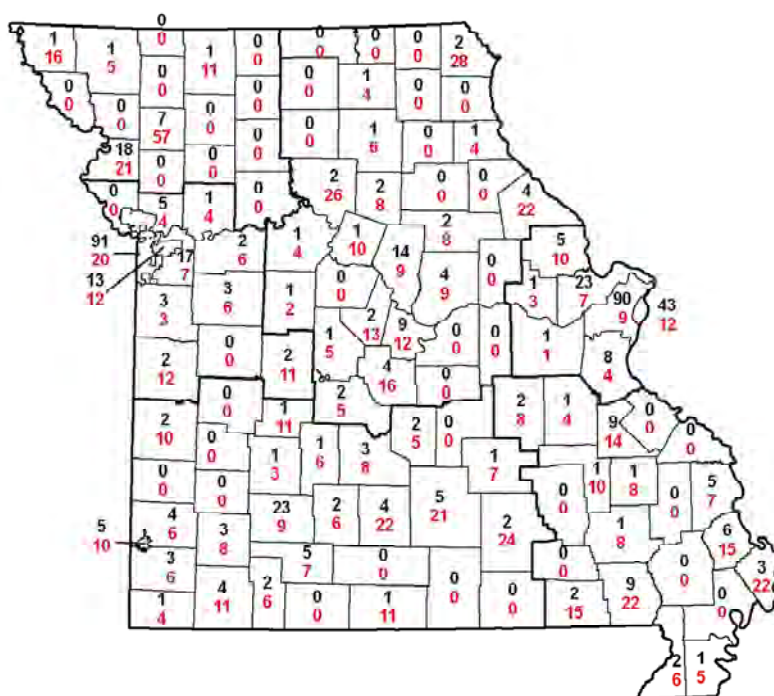
The largest numbers of chlamydia cases were reported among black females (7,272) and white females (5,593) (Figure 28). The number of reported cases increased from 2007 to 2008 among all race/ethnicity and sex categories presented. The number of cases increased from 1,320 to 1,357 among white males, from 5,571 to 5,593 among white females, from 3,559 to 3,801 among black, and from 6,975 to 7,272 among black females. Among white and black males and white females, the largest number of cases was reported among individuals 20-24 years of age at the time of diagnosis. Among black females, the largest number of cases was reported among 15-19 year olds.

The number of reported chlamydia cases in Missouri increased by from 2003 to 2008 (Figure 29). Similar trends were observed for all HIV regions. Although the number of reported chlamydia cases decreased slightly in the Northwest HIV region from 687 to 676 between 2007 and 2008.

<b>Table 26. Reported Hepatitis B<sup>†</sup> cases and rates, by race*, by geographic region, by sex, Missouri, 2008</b>								
	<b>Male</b>			<b>Female</b>			<b>Total</b>	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
<b>Missouri</b>								
White	77	32.0%	3.2	54	20.1%	2.2	131	2.7
Black	29	12.0%	8.9	29	10.8%	7.9	58	8.4
Other/Unknown*	135	56.0%	--	186	69.1%	--	321	--
<b>Total Cases</b>	<b>241</b>	<b>100.0%</b>	<b>8.4</b>	<b>269</b>	<b>100.0%</b>	<b>8.9</b>	<b>510</b>	<b>8.7</b>
<b>St. Louis Region</b>								
White	16	18.6%	2.1	13	15.3%	1.6	29	1.8
Black	15	17.4%	7.9	10	11.8%	4.4	25	6.0
Other/Unknown*	55	64.0%	--	62	72.9%	--	117	--
<b>Total Cases</b>	<b>86</b>	<b>100.0%</b>	<b>8.5</b>	<b>85</b>	<b>100.0%</b>	<b>7.9</b>	<b>171</b>	<b>8.2</b>
<b>Kansas City Region</b>								
White	16	27.6%	3.4	4	4.9%	0.8	20	2.1
Black	10	17.2%	12.1	16	19.8%	16.9	26	14.7
Other/Unknown*	32	55.2%	--	61	75.3%	--	93	--
<b>Total Cases</b>	<b>58</b>	<b>100.0%</b>	<b>9.7</b>	<b>81</b>	<b>100.0%</b>	<b>12.9</b>	<b>139</b>	<b>11.3</b>
<b>Northwest Region</b>								
White	3	16.7%	2.7	1	10.0%	0.9	4	1.8
Black	0	0.0%	0.0	0	0.0%	0.0	0	0.0
Other/Unknown*	15	83.3%	--	9	90.0%	--	24	--
<b>Total Cases</b>	<b>18</b>	<b>100.0%</b>	<b>14.9</b>	<b>10</b>	<b>100.0%</b>	<b>8.3</b>	<b>28</b>	<b>11.6</b>
<b>North Central Region</b>								
White	6	35.3%	1.8	16	43.2%	4.7	22	3.3
Black	2	11.8%	9.0	2	5.4%	10.5	4	9.7
Other/Unknown*	9	52.9%	--	19	51.4%	--	28	--
<b>Total Cases</b>	<b>17</b>	<b>100.0%</b>	<b>4.7</b>	<b>37</b>	<b>100.0%</b>	<b>9.9</b>	<b>54</b>	<b>7.3</b>
<b>Southwest Region</b>								
White	23	60.5%	4.6	11	29.7%	2.1	34	3.3
Black	1	2.6%	8.4	0	0.0%	0.0	1	4.6
Other/Unknown*	14	36.8%	--	26	70.3%	--	40	--
<b>Total Cases</b>	<b>38</b>	<b>100.0%</b>	<b>7.0</b>	<b>37</b>	<b>100.0%</b>	<b>6.6</b>	<b>75</b>	<b>6.8</b>
<b>Southeast Region</b>								
White	13	54.2%	6.0	9	47.4%	4.0	22	4.9
Black	1	4.2%	6.7	1	5.3%	6.9	2	6.8
Other/Unknown*	10	41.7%	--	9	47.4%	--	19	--
<b>Total Cases</b>	<b>24</b>	<b>100.0%</b>	<b>10.0</b>	<b>19</b>	<b>100.0%</b>	<b>7.7</b>	<b>43</b>	<b>8.8</b>
<sup>†</sup> Includes confirmed and probable case classifications of Hepatitis B Acute, Hepatitis B Chronic, and Hepatitis B Prenatal.								
*Includes cases identified with Hispanic ethnicity.								
**Per 100,000 population based on 2007 MDHSS population estimates.								

Of the 510 Hepatitis B cases reported in 2008, 38 were reported with acute Hepatitis B, 328 with chronic Hepatitis B, and 144 with prenatal Hepatitis B. The number of reported Hepatitis B cases in Missouri increased by two cases from 2007 (508) to 2008 (510) (Table 26). Among the HIV regions, the number of persons reported with Hepatitis B decreased from 2007 to 2008 in the Kansas City (192 to 139) and North Central (60 to 54) HIV regions, but increased in the St. Louis (137 to 171), Northwest (17 to 28), Southwest (62 to 75), and Southeast (40 to 43) HIV regions. Overall, the rate of reported Hepatitis B cases was highest in the Northwest HIV region (11.6 per 100,000). Overall, 53% of reported cases were females, although variation in the ratio of male to female cases existed among the HIV regions. The large proportion of cases with unknown race information makes it difficult to interpret differences in reported infections by race.

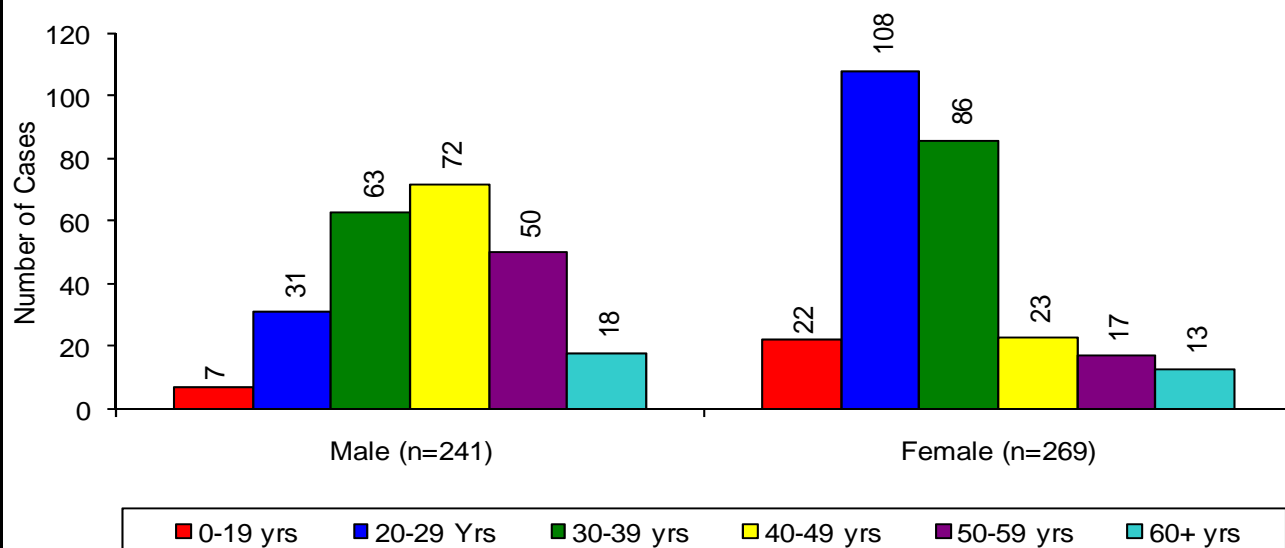
**Figure 30. Reported Hepatitis B cases\* and rates\*\*, by county, Missouri, 2008**



\*Case counts are in black.

\*\*Case rates are in red, per 100,000 population based on 2007 MDHSS population estimates.

**Figure 31. Reported Hepatitis B cases, by sex and by age group at diagnosis, Missouri, 2008**



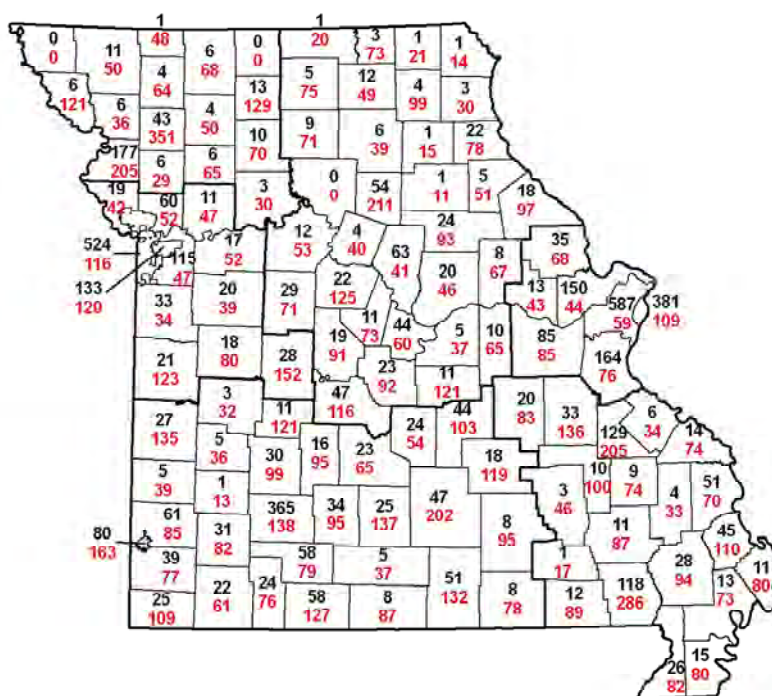
Note: Totals include persons whose age at diagnosis is unknown.

Kansas City had the greatest number of reported Hepatitis B cases (91), followed by St. Louis County (90) (Figure 30). There were 44 jurisdictions that did not report any Hepatitis B cases in 2008.

There were differences in the age distribution of reported Hepatitis B cases by sex (Figure 31). Among males, the largest numbers of reported cases were between 40-49 years of age. The largest numbers of cases were 20-29 years of age at diagnosis among females.

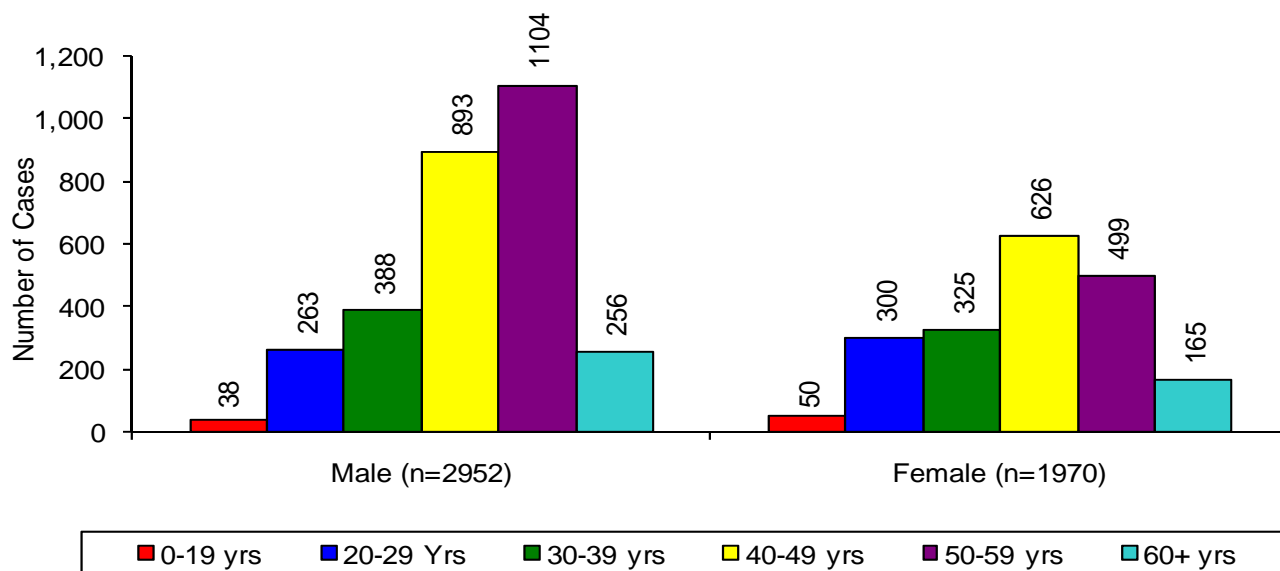
<b>Table 27. Reported Hepatitis C<sup>†</sup> cases and rates, by race*, by geographic region, by sex, Missouri, 2008</b>								
	<b>Male</b>			<b>Female</b>			<b>Total<sup>‡</sup></b>	
	Cases	%	Rate**	Cases	%	Rate**	Cases	Rate**
<b>Missouri</b>								
White	1,068	36.2%	44.7	762	38.7%	30.6	1,831	37.5
Black	228	7.7%	70.0	132	6.7%	36.0	360	52.0
Other/Unknown*	1,656	56.1%	--	1,076	54.6%	--	2,732	--
<b>Total Cases</b>	<b>2,952</b>	<b>100.0%</b>	<b>102.8</b>	<b>1,970</b>	<b>100.0%</b>	<b>65.5</b>	<b>4,923</b>	<b>83.7</b>
<b>St. Louis Region</b>								
White	198	23.2%	25.8	139	24.7%	17.3	337	21.4
Black	104	12.2%	54.9	47	8.4%	20.8	151	36.4
Other/Unknown*	551	64.6%	--	376	66.9%	--	927	--
<b>Total Cases</b>	<b>853</b>	<b>100.0%</b>	<b>84.7</b>	<b>562</b>	<b>100.0%</b>	<b>52.0</b>	<b>1,415</b>	<b>67.8</b>
<b>Kansas City Region</b>								
White	212	35.9%	45.5	148	36.3%	30.5	360	37.8
Black	92	15.6%	111.7	70	17.2%	73.9	162	91.5
Other/Unknown*	287	48.6%	--	190	46.6%	--	477	--
<b>Total Cases</b>	<b>591</b>	<b>100.0%</b>	<b>98.7</b>	<b>408</b>	<b>100.0%</b>	<b>65.0</b>	<b>999</b>	<b>81.4</b>
<b>Northwest Region</b>								
White	58	29.3%	51.9	33	33.7%	28.8	91	40.2
Black	6	3.0%	119.4	2	2.0%	70.0	8	101.5
Other/Unknown*	134	67.7%	--	63	64.3%	--	197	--
<b>Total Cases</b>	<b>198</b>	<b>100.0%</b>	<b>164.1</b>	<b>98</b>	<b>100.0%</b>	<b>80.9</b>	<b>296</b>	<b>122.4</b>
<b>North Central Region</b>								
White	150	47.8%	45.7	103	56.0%	30.3	253	37.9
Black	6	1.9%	26.9	2	1.1%	10.5	8	19.4
Other/Unknown*	158	50.3%	--	79	42.9%	--	237	--
<b>Total Cases</b>	<b>314</b>	<b>100.0%</b>	<b>85.9</b>	<b>184</b>	<b>100.0%</b>	<b>49.4</b>	<b>498</b>	<b>67.5</b>
<b>Southwest Region</b>								
White	333	52.0%	67.0	261	50.8%	50.2	595	58.5
Black	9	1.4%	75.5	9	1.8%	92.1	18	83.0
Other/Unknown*	299	46.6%	--	244	47.5%	--	543	--
<b>Total Cases</b>	<b>641</b>	<b>100.0%</b>	<b>118.9</b>	<b>514</b>	<b>100.0%</b>	<b>92.2</b>	<b>1,156</b>	<b>105.4</b>
<b>Southeast Region</b>								
White	117	33.0%	53.6	78	38.2%	34.3	195	43.7
Black	11	3.1%	74.2	2	1.0%	13.7	13	44.3
Other/Unknown*	227	63.9%	--	124	60.8%	--	351	--
<b>Total Cases</b>	<b>355</b>	<b>100.0%</b>	<b>148.2</b>	<b>204</b>	<b>100.0%</b>	<b>82.4</b>	<b>559</b>	<b>114.8</b>
<sup>†</sup> Includes confirmed and probable case classifications of Hepatitis C Acute and Hepatitis C Chronic.								
*Includes cases identified with Hispanic ethnicity.								
<sup>‡</sup> Includes persons with unknown or other sex.								
**Per 100,000 population based on 2007 MDHSS population estimates.								

Of the 4,923 Hepatitis C cases reported in 2008, two were reported with acute Hepatitis C, and 4,921 with chronic Hepatitis C. The number of reported Hepatitis C cases in Missouri increased by 455 cases from 2007 (4,468) to 2008 (4,923) (Table 27). Among the HIV regions, the number of persons reported with Hepatitis C decreased from 2007 to 2008 in the North Central (597 to 498) and Southeast (636 to 559) HIV regions, but increased in the St. Louis (1,012 to 1,415), Kansas City (916 to 999), Northwest (174 to 296), and Southwest (1,133 to 1,156) HIV regions. Overall, the rate of reported Hepatitis C cases was highest in the Northwest HIV region (122.4 per 100,000). In Missouri overall, 60% of the reported cases were males. The large proportion of cases with unknown race information makes it difficult to interpret differences in reported infections by race.

**Figure 32. Reported Hepatitis C cases\* and rates\*\*, by county, Missouri, 2008**

\*Case counts are in black.

\*\*Case rates are in red, per 100,000 population based on 2007 MDHSS population estimates.

**Figure 33. Reported Hepatitis C cases, by sex and by age group at diagnosis, Missouri, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

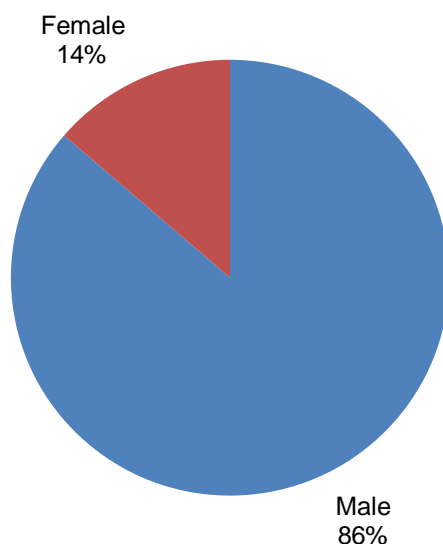
St. Louis County had the greatest number of reported Hepatitis C cases with 587 cases (Figure 32). The second largest number of Hepatitis C cases occurred in Kansas City (524). There were 3 counties that did not report any Hepatitis C cases in 2008.

There were differences in the age distribution of reported Hepatitis C cases by sex (Figure 33). Among males, the largest numbers of reported cases were between 50-59 years of age. The largest numbers of cases were 40-49 years of age at diagnosis among females.

**Table 28. HIV and STD co-infections, Missouri, 2008**

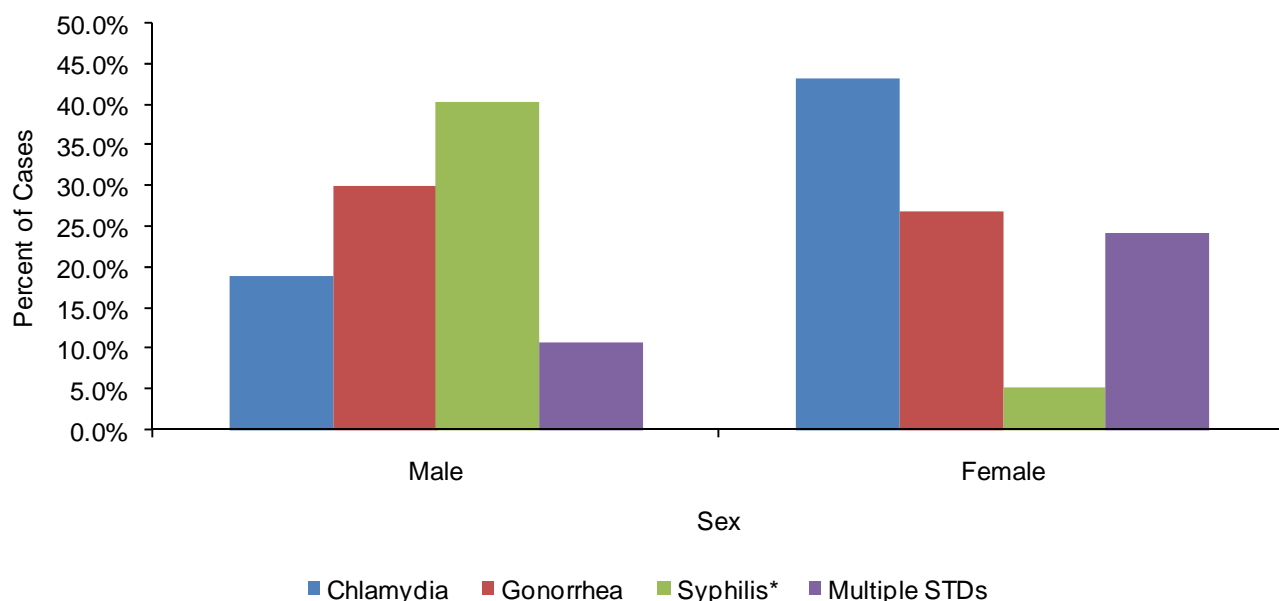
Co-infection	Diagnosed with HIV Prior to 2008		Diagnosed with HIV in 2008		Total	
	N	%	N	%	N	%
Chlamydia	46	23.5%	14	18.9%	60	22.2%
Gonorrhea	58	29.6%	22	29.7%	80	29.6%
Syphilis*	67	34.2%	29	39.2%	96	35.6%
Chlamydia and Gonorrhea	14	7.1%	6	8.1%	20	7.4%
Chlamydia and Syphilis*	1	0.5%	2	2.7%	3	1.1%
Gonorrhea and Syphilis*	8	4.1%	1	1.4%	9	3.3%
Chlamydia, Gonorrhea, and Syphilis*	2	1.0%	0	0.0%	2	0.7%
<b>Total</b>	<b>196</b>	<b>100.0%</b>	<b>74</b>	<b>100.0%</b>	<b>270</b>	<b>100.0%</b>

\*Only includes diagnoses of primary, secondary, and early latent syphilis.

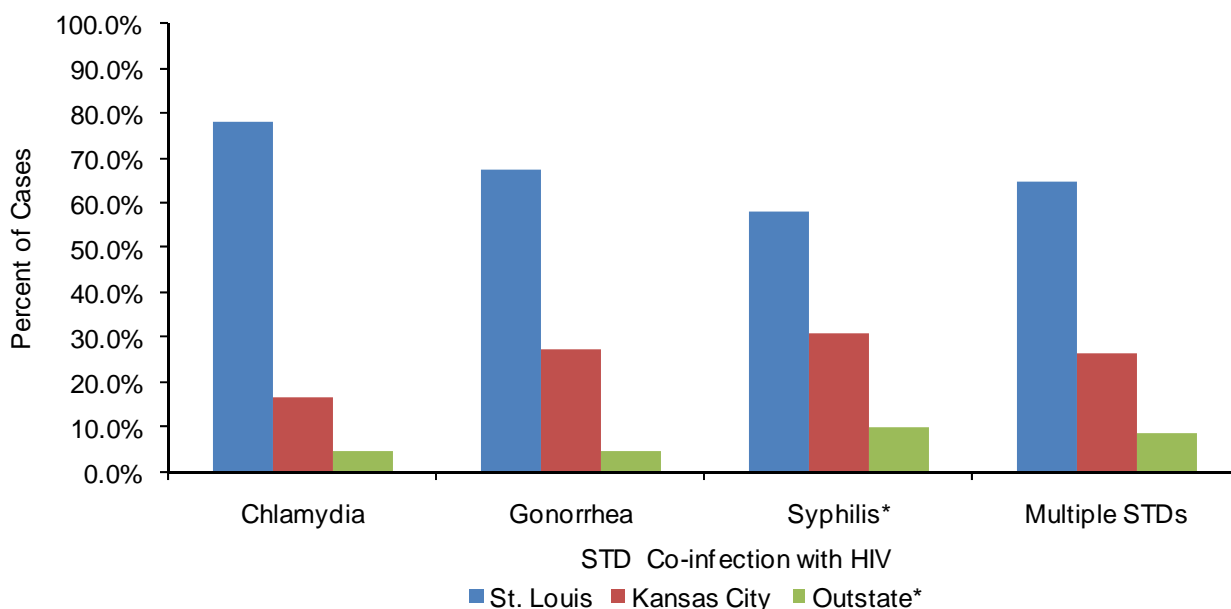
**Figure 34. HIV and STD co-infections by sex, Missouri, 2008**

Of the 10,834 individuals living with HIV disease, 270 were reported with an STD co-morbidity in 2008 (Table 28). The majority of those reported with an STD co-morbidity were diagnosed with HIV prior to 2008 (73%). However, the proportion of newly diagnosed cases with an STD diagnosed in the same year was greater (12%) than the proportion of living cases diagnosed with an STD in 2008 (2%). There were not significant differences in the type of STD co-morbidity diagnosed based on when the individual was diagnosed with HIV. The largest number of co-morbidities was between HIV and early syphilis, followed by HIV and gonorrhea. The proportion of reported STD infections in 2008 that were living with HIV varied by infection type. Of the 369 early syphilis cases reported in 2008, 30% were among individuals living with HIV. Only 1% of gonorrhea cases and less than 1% of chlamydia cases reported in 2008 were among individuals living with HIV.

Of the 270 reported STD co-morbidity cases, 86% were among males (Figure 34). Males represented a slightly higher proportion of the STD co-morbidity cases (86%) compared to all males living with HIV disease (84%).

**Figure 35. HIV and STD co-infections by sex and type of co-infection, Missouri, 2008**

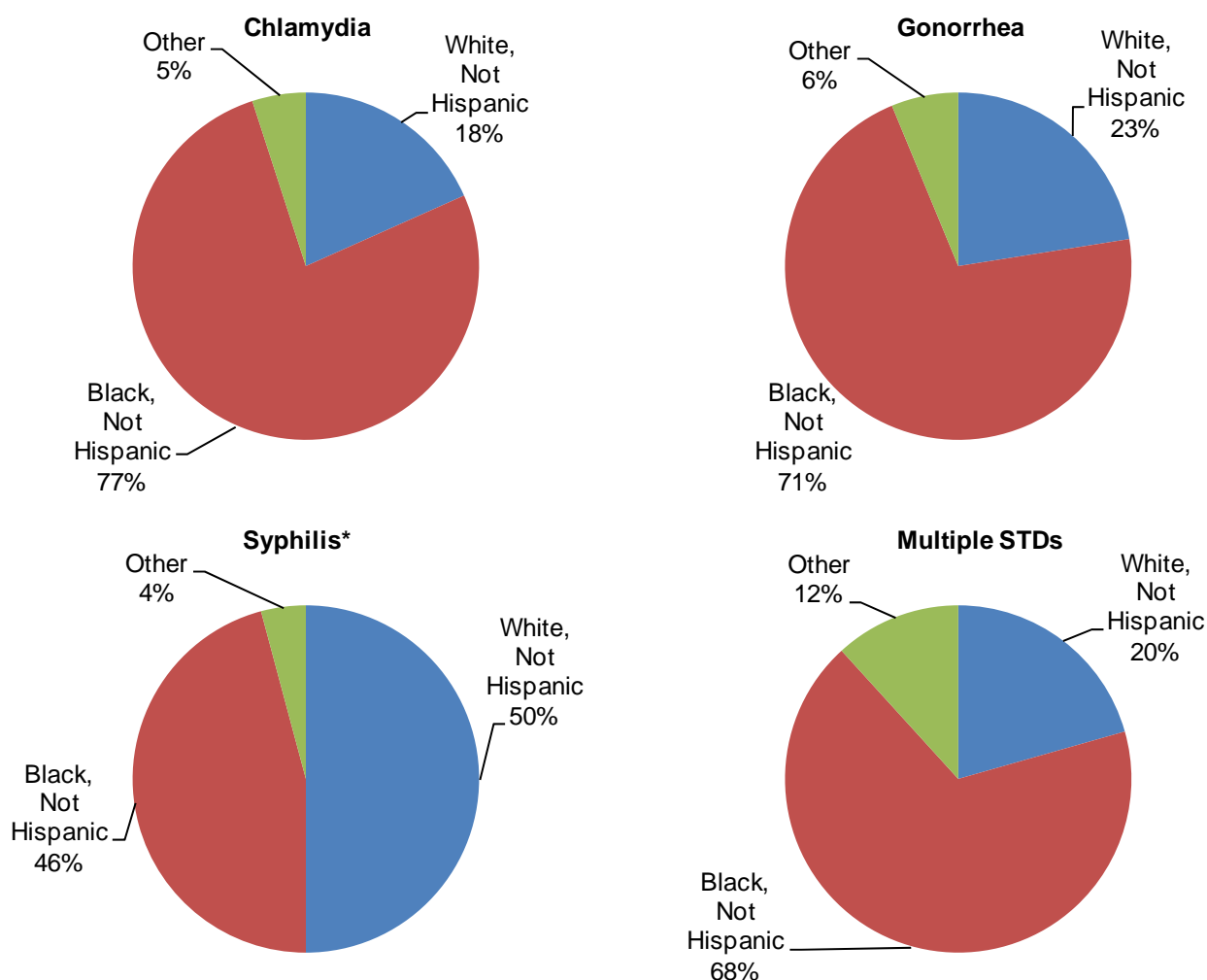
\*Only includes diagnoses of primary, secondary, and early latent syphilis.

**Figure 36. HIV and STD co-infections by geographic region of STD diagnosis, Missouri, 2008**

\*Includes those diagnosed in the North Central, Northwest, Southeast, and Southwest regions.

There were differences in the distribution of STD co-morbidity types by sex (Figure 35). Among females living with HIV that were reported with a STD co-morbidity in 2008, 43% were co-infected with chlamydia, 27% with gonorrhea, 24% with multiple STDs, and 5% with early syphilis. In contrast, among males living with HIV reported with a STD co-morbidity in 2008, only 19% were co-infected with chlamydia, 30% with gonorrhea, 11% with multiple STDs, and 40% with early syphilis.

Among all HIV and STD co-morbidity types, the greatest proportion of cases was diagnosed in the St. Louis HIV region (Figure 36). Among those living with HIV that were reported with chlamydia in 2008, 78% were residents of the St. Louis HIV region when diagnosed with chlamydia. The St. Louis HIV region represented 68% of all living HIV cases reported with gonorrhea in 2008, 58% of those with early syphilis, and 65% of those with multiple STD co-morbidities. There were differences in the distribution of cases by region for the different co-morbidity types. For example, a greater proportion of early syphilis co-morbidity cases were diagnosed in the Kansas City HIV region (31%) and the Outstate HIV regions (10%) compared to other co-morbidity types diagnosed in these areas.

**Figure 37. HIV and STD co-infections by race/ethnicity and type of co-infection, Missouri, 2008**

\*Only includes diagnoses of primary, secondary, and early latent syphilis.

There were differences in the distribution of race/ethnicity among HIV and STD co-morbidities depending on the type of STD diagnosed (Figure 37). The proportion of co-morbidity cases attributed to blacks was highest among those co-infected with chlamydia (77%), followed by those with gonorrhea co-infections (71%). In all instances minorities were disproportionately represented in the proportion of co-morbidities that were reported. Although blacks represented only 44% of living HIV disease cases, they represented 63% of individuals diagnosed with an STD co-morbidity.

## **Key Highlights: What are the number and characteristics of the individuals who know they are HIV positive but who are not in care?**

### **Magnitude of the Problem**

- Overall, 58% of Missourians living with HIV disease had their primary care medical needs met (i.e., evidence of a CD4 lymphocyte or viral load test or diagnosis with an opportunistic infection in 2008).
- Persons enrolled in HIV medical case management were significantly more likely to have their primary care medical needs met. Of the 10,834 persons living with HIV disease in Missouri, 3,798 (35%) were enrolled in medical case management. Ninety-eight percent of individuals in case management had their primary care medical needs met in 2008.
- Persons living with HIV who were subcategorized as AIDS cases in 2008 were more likely to have their medical needs met (67%) compared to persons subcategorized as HIV cases (48%). Similar patterns were seen regardless of whether the individuals were enrolled in HIV medical case management.
- Enrollment in HIV medical case management and current diagnostic status (i.e., HIV or AIDS) were important factors influencing unmet need.

### **Where**

- Overall, the proportion of individuals with a met need was greatest in the North Central HIV region (65%), and lowest in the St. Louis HIV region (52%).
- Among those enrolled in HIV medical case management, the proportion with a met need ranged from 95% in the Southeast HIV region to 100% in the Northwest HIV region.
- For those not enrolled in HIV medical case management, the proportion with a met need ranged from 29% in the Southeast HIV region to 51% in the Northwest HIV region.

### **Who**

#### **Sex**

- Overall, there were not significant differences observed in unmet need by sex, after controlling for factors such as enrollment in HIV medical case management, and current diagnostic status (i.e., HIV or AIDS).

#### ***Race/Ethnicity***

- Among individuals not enrolled in HIV medical case management, there were differences in the proportion of persons with an unmet primary medical care need by race/ethnicity. Regardless of current diagnostic status, unmet need was greater for Hispanics than for blacks, and greater for blacks than whites. The disparity in unmet need between blacks and Hispanics was greater among persons classified as AIDS cases compared to those classified as HIV cases.
- There were not significant differences in unmet need by race/ethnicity among persons enrolled in HIV medical case management.

#### ***Age***

- There were not differences in unmet need by current age among individuals enrolled in HIV medical case management, regardless of diagnostic status.
- There were differences in unmet need by current age among individuals not enrolled in HIV medical case management. Trends were similar among persons classified as HIV and AIDS cases. Among persons currently 19 years of age or greater, unmet need increased with increasing age.

#### ***Exposure Category***

- There were not significant differences in unmet need by exposure category among individuals enrolled in HIV medical case management, regardless of diagnostic status. Among individuals in HIV medical case management, MSM represented the largest number of persons with unmet need (53). However, this group also represented the largest number of individuals enrolled in case management (2,137).
- There were differences in unmet need by exposure category among individuals not enrolled in HIV medical case management. Different trends in unmet need were observed based on the current diagnostic status of the individual. Among persons classified as HIV cases, unmet need was greatest among adults who became infected through the receipt of clotting factors, contaminated blood products or occupational exposure. However, the number of persons in this exposure category overall was small. Persons whose infection was attributed to heterosexual contact had the second highest proportion of unmet need among HIV cases. Among HIV cases, unmet need was lowest among persons infected at less than 13 years of age. Among persons classified as AIDS cases, unmet need was greatest among injecting drug users, and lowest among persons with no indicated risk.

**Table 29. The impact of HIV case management on access to primary medical care by region\* and race/ethnicity among individuals living with HIV disease as of December 31, 2008**

Region	Total HIV Population		Enrolled in Case Management		Not Enrolled in Case Management	
	Met Need** N (%)	Unmet Need*** N (%)	Met Need** N (%)	Unmet Need*** N (%)	Met Need** N (%)	Unmet Need*** N (%)
<b>St. Louis Region</b>						
White	1,204 (52.0%)	1,113 (48.0%)	635 (98.1%)	12 (1.9%)	569 (34.1%)	1,101 (65.9%)
Black	1,430 (52.8%)	1,278 (47.2%)	982 (96.7%)	33 (3.3%)	448 (26.5%)	1,245 (73.5%)
Hispanic	57 (48.7%)	60 (51.3%)	40 (95.2%)	2 (4.8%)	17 (22.7%)	58 (77.3%)
Other/Unk.	29 (43.3%)	38 (56.7%)	13 (100.0%)	0 (0.0%)	16 (29.6%)	38 (70.4%)
<b>Total</b>	<b>2,720 (52.2%)</b>	<b>2,489 (47.8%)</b>	<b>1,670 (97.3%)</b>	<b>47 (2.7%)</b>	<b>1,050 (30.1%)</b>	<b>2,442 (69.9%)</b>
<b>Kansas City Region</b>						
White	1,158 (65.7%)	604 (34.3%)	548 (97.9%)	12 (2.1%)	610 (50.7%)	592 (49.3%)
Black	750 (62.1%)	458 (37.9%)	488 (97.8%)	11 (2.2%)	262 (37.0%)	447 (63.0%)
Hispanic	103 (54.8%)	85 (45.2%)	74 (98.7%)	1 (1.3%)	29 (25.7%)	84 (74.3%)
Other/Unk.	25 (61.0%)	16 (39.0%)	15 (100.0%)	0 (0.0%)	10 (38.5%)	16 (61.5%)
<b>Total</b>	<b>2,036 (63.6%)</b>	<b>1,163 (36.4%)</b>	<b>1,125 (97.9%)</b>	<b>24 (2.1%)</b>	<b>911 (44.4%)</b>	<b>1,139 (55.6%)</b>
<b>Northwest Region</b>						
White	55 (62.5%)	33 (37.5%)	24 (100.0%)	0 (0.0%)	31 (48.4%)	33 (51.6%)
Black	11 (73.3%)	4 (26.7%)	4 (100.0%)	0 (0.0%)	7 (63.6%)	4 (36.4%)
Hispanic	1 (33.3%)	2 (66.7%)	0 (N/A)	0 (N/A)	1 (33.3%)	2 (66.7%)
Other/Unk.	2 (100.0%)	0 (0.0%)	0 (N/A)	0 (N/A)	2 (100.0%)	0 (0.0%)
<b>Total</b>	<b>69 (63.9%)</b>	<b>39 (36.1%)</b>	<b>28 (100.0%)</b>	<b>0 (0.0%)</b>	<b>41 (51.3%)</b>	<b>39 (48.8%)</b>
<b>North Central Region</b>						
White	208 (66.2%)	106 (33.8%)	119 (99.2%)	1 (0.8%)	89 (45.9%)	105 (54.1%)
Black	68 (60.2%)	45 (39.8%)	37 (94.9%)	2 (5.1%)	31 (41.9%)	43 (58.1%)
Hispanic	15 (71.4%)	6 (28.6%)	8 (100.0%)	0 (0.0%)	7 (53.8%)	6 (46.2%)
Other/Unk.	2 (50.0%)	2 (50.0%)	1 (100.0%)	0 (0.0%)	1 (33.3%)	2 (66.7%)
<b>Total</b>	<b>293 (64.8%)</b>	<b>159 (35.2%)</b>	<b>165 (98.2%)</b>	<b>3 (1.8%)</b>	<b>128 (45.1%)</b>	<b>156 (54.9%)</b>
<b>Southwest Region</b>						
White	436 (64.6%)	239 (35.4%)	313 (98.4%)	5 (1.6%)	123 (34.5%)	234 (65.5%)
Black	52 (61.9%)	32 (38.1%)	41 (100.0%)	0 (0.0%)	11 (25.6%)	32 (74.4%)
Hispanic	18 (66.7%)	9 (33.3%)	15 (100.0%)	0 (0.0%)	3 (25.0%)	9 (75.0%)
Other/Unk.	4 (33.3%)	8 (66.7%)	2 (100.0%)	0 (0.0%)	2 (20.0%)	8 (80.0%)
<b>Total</b>	<b>510 (63.9%)</b>	<b>288 (36.1%)</b>	<b>371 (98.7%)</b>	<b>5 (1.3%)</b>	<b>139 (32.9%)</b>	<b>283 (67.1%)</b>
<b>Southeast Region</b>						
White	127 (58.3%)	91 (41.7%)	91 (92.9%)	7 (7.1%)	36 (30.0%)	84 (70.0%)
Black	54 (62.1%)	33 (37.9%)	43 (97.7%)	1 (2.3%)	11 (25.6%)	32 (74.4%)
Hispanic	4 (66.7%)	2 (33.3%)	2 (100.0%)	0 (0.0%)	2 (50.0%)	2 (50.0%)
Other/Unk.	1 (50.0%)	1 (50.0%)	1 (100.0%)	0 (0.0%)	0 (0.0%)	1 (100.0%)
<b>Total</b>	<b>186 (59.4%)</b>	<b>127 (40.6%)</b>	<b>137 (94.5%)</b>	<b>8 (5.5%)</b>	<b>49 (29.2%)</b>	<b>119 (70.8%)</b>
<b>Statewide (MO)****</b>						
White	3,330 (59.3%)	2,283 (40.7%)	1,800 (97.9%)	38 (2.1%)	1,530 (40.5%)	2,245 (59.5%)
Black	2,674 (56.7%)	2,040 (43.3%)	1,733 (97.2%)	50 (2.8%)	941 (32.1%)	1,990 (67.9%)
Hispanic	205 (54.5%)	171 (45.5%)	141 (97.9%)	3 (2.1%)	64 (27.6%)	168 (72.4%)
Other/Unk.	64 (48.9%)	67 (51.1%)	33 (100.0%)	0 (0.0%)	31 (31.6%)	67 (68.4%)
<b>Total</b>	<b>6,273 (57.9%)</b>	<b>4,561 (42.1%)</b>	<b>3,707 (97.6%)</b>	<b>91 (2.4%)</b>	<b>2,566 (36.5%)</b>	<b>4,470 (63.5%)</b>

\*Includes all individual still living whose most recent diagnosis (i.e., HIV or AIDS) occurred in the region. Does not reflect the number of individuals currently living in the region.

\*\*Evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.

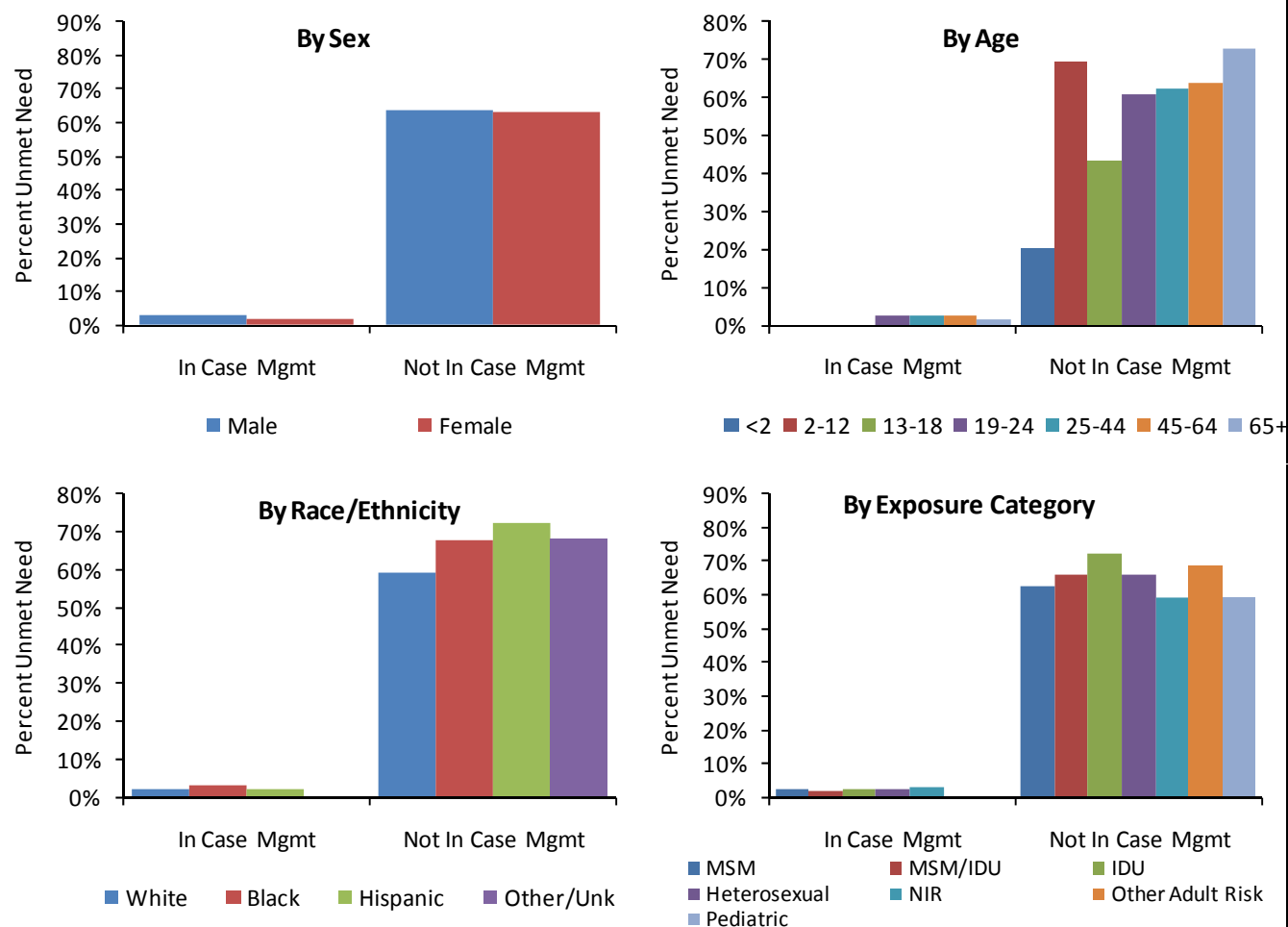
\*\*\* No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.

\*\*\*\*Statewide figures includes living individuals whose most recent diagnosis occurred in a correctional facility or is unknown.

Of the 10,834 persons living with HIV at the end of 2008, 58% had evidence of met primary care medical needs (i.e., met need) in 2008 (Table 29). The primary care medical need was considered to be met if an individual had a CD4 lymphocyte or viral load laboratory test or diagnosis of an opportunistic infection in 2008 that was reported to MDHSS. There were differences in the proportion of individuals with met needs depending on whether the individual was enrolled in HIV medical case management in 2008. A significantly greater proportion of those enrolled in HIV medical case management had a met need (98%) in 2008 compared to those not enrolled (37%). Several factors may contribute to the differences observed. First, case management assists clients to locate and access medical care by referral. Second, case management clients receive health education and counseling to understand the nature of routine medical care. Third, case management assists clients in identifying appropriate payer sources to fund routine medical care. Finally, it is possible that those not enrolled in case management were less likely to be currently living in Missouri, and therefore indicators of primary medical care would not be reported to MDHSS. The data were presented based on individuals whose most recent diagnosis occurred in Missouri, not those known to be currently living in Missouri, as accurate data on current residence is difficult to collect.

There were differences in the proportion of individuals with a met need by HIV region. It is important to note that data presented by HIV region represent those who currently have a met need that were most recently diagnosed with HIV or AIDS in the selected HIV region. It does not necessarily reflect where individuals are currently living and receiving care. Overall, the proportion of individuals with a met need was greatest in the North Central HIV region (65%), and lowest in the St. Louis HIV region (52%). The pattern was slightly different between the regions depending on whether individuals were enrolled in HIV medical case management. Among those enrolled in HIV medical case management, the proportion with a met need ranged from 95% in the Southeast HIV region to 100% in the Northwest HIV region. For those not enrolled in HIV medical case management, the proportion with a met need ranged from 29% in the Southeast HIV region to 51% in the Northwest HIV region.

There were differences in the proportion of persons with a met need by race/ethnicity. Overall statewide, met need was greatest among whites (60%), followed by blacks (57%), Hispanics (55%), and then those of another race or unknown race (49%). Within each region and depending on whether the individuals were enrolled in HIV medical case management, the patterns by race/ethnicity varied slightly. For example, in the St. Louis HIV region overall, the proportion of individuals with a met need was approximately the same for whites (52%) and blacks (53%). However, in the St. Louis HIV region among those not enrolled in case management, the proportion of those with a met need was greater for whites (34%) than blacks (27%).

**Figure 38. Percent of individuals living with HIV having an unmet\* primary medical care need in 2008 by enrollment in HIV case management and selected characteristics**

\*No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.

Figure 38 examines the proportion of cases with unmet need depending on whether the individuals were enrolled in HIV medical case management for selected characteristics. There were not differences in the proportion of individuals with unmet needs between the sexes, regardless of whether enrolled in HIV medical case management. There were differences in the proportion of individuals with unmet needs by current age among those not enrolled in case management. Unmet need was greatest among persons greater than 65 or more years of age (73%) and persons currently 2 to 12 years of age (70%). Children less than 2 years of age and those currently 13-18 years of age had the lowest proportion of unmet need. There were not differences in the proportion of individuals with unmet needs by current age among those enrolled in case management. There were differences in the proportion of individuals with unmet needs by race/ethnicity among those not enrolled in case management, but were not differences among those enrolled in case management. Among those not enrolled in case management, unmet need was greatest among Hispanics (72%) and lowest among whites (59%). There were differences in the proportion of individuals with unmet need by exposure category among those not in case management, but were not differences among those enrolled in case management. For individuals not enrolled in case management, unmet need was greatest among IDU (72%) and lowest among pediatric cases (59%), and those with no indicated risk (NIR) (59%). The lower proportion of unmet need among those with no indicated risk may be related to the fact that these cases were more recently diagnosed. It is recommended that new diagnoses have a CD4 lymphocyte and viral load test completed, which indicates a met need, but those newly diagnosed may not feel comfortable reporting risk information to their new provider, or medical providers may not have had as many opportunities to obtain this information.

Table 30 examines the proportion of cases reported with unmet need based on current status (i.e., HIV or AIDS) and selected characteristics. Overall, the proportion of those with an unmet need was greater for those classified as HIV cases compared to AIDS cases. The same trend was observed regardless of whether individuals were enrolled in HIV medical case management. Unmet need was greater for males than females regardless of current status and whether enrolled in case management.

**Table 30. Percent of individuals living with HIV having an unmet\* primary medical care need in 2008 by current status\*\*, enrollment in HIV case management, and selected characteristics**

	Total Population		Enrolled in Case Management		Not Enrolled in Case Management	
	HIV Cases with Unmet Need* % (N)	AIDS Cases with Unmet Need* % (N)	HIV Cases with Unmet Need* % (N)	AIDS Cases with Unmet Need* % (N)	HIV Cases with Unmet Need* % (N)	AIDS Cases with Unmet Need* % (N)
<b>Sex</b>						
Male	54.8% (2,246)	34.4% (1,702)	3.9% (40)	1.9% (36)	71.7% (2,206)	55.3% (1,666)
Female	42.0% (389)	25.9% (224)	3.1% (12)	0.7% (3)	70.5% (377)	53.5% (221)
<b>Race/Ethnicity</b>						
White	49.4% (1,248)	33.5% (1,035)	3.2% (22)	1.4% (16)	66.4% (1,226)	52.8% (1,019)
Black	55.2% (1,236)	32.5% (804)	4.2% (28)	2.0% (22)	76.6% (1,208)	57.7% (782)
Hispanic	54.6% (100)	36.8% (71)	3.6% (2)	1.1% (1)	77.2% (98)	66.7% (70)
Other/Unknown	66.2% (51)	29.6% (16)	0.0% (0)	0.0% (0)	81.0% (51)	45.7% (16)
<b>Current Age<sup>‡</sup></b>						
<2	20.0% (1)	-- (0)	-- (0)	-- (0)	20.0% (1)	-- (0)
2-12	50.0% (15)	33.3% (1)	0.0% (0)	0.0% (0)	71.4% (15)	50.0% (1)
13-18	22.7% (10)	15.8% (3)	0.0% (0)	0.0% (0)	45.5% (10)	37.5% (3)
19-24	41.3% (128)	9.0% (8)	3.8% (5)	0.0% (0)	68.7% (123)	22.2% (8)
25-44	51.0% (1,355)	29.2% (727)	4.2% (33)	1.3% (15)	70.4% (1,322)	51.9% (712)
45-64	55.8% (1,031)	35.9% (1,072)	3.1% (14)	2.0% (23)	73.2% (1,017)	57.1% (1,049)
65+	71.4% (95)	52.5% (115)	0.0% (0)	2.0% (1)	80.5% (95)	67.5% (114)
<b>Exposure Category</b>						
Men who have sex with men	53.7% (1,506)	33.6% (1,191)	4.0% (29)	1.7% (24)	71.1% (1,477)	54.7% (1,167)
Men who have sex with men and inject drugs	46.1% (101)	37.3% (152)	3.4% (3)	1.2% (2)	74.2% (98)	62.0% (150)
Injecting drug use	57.6% (160)	40.4% (176)	4.4% (3)	1.6% (3)	74.8% (157)	70.3% (173)
Heterosexual contact	49.7% (362)	29.6% (229)	3.0% (8)	1.4% (5)	77.1% (354)	54.4% (224)
No indicated risk (NIR)	51.0% (468)	25.7% (146)	3.8% (9)	2.2% (5)	67.7% (459)	41.8% (141)
Other Adult Risk	63.6% (14)	49.0% (24)	0.0% (0)	0.0% (0)	82.4% (14)	63.2% (24)
Pediatric	42.9% (24)	26.7% (8)	0.0% (0)	0.0% (0)	63.2% (24)	50.0% (8)
<b>Total</b>	<b>52.4%(2,635)</b>	<b>33.2%(1,926)</b>	<b>3.7%(52)</b>	<b>1.6%(39)</b>	<b>71.5%(2,583)</b>	<b>55.1%(1,887)</b>

\*No evidence of a CD4+ T-lymphocyte or viral load laboratory test result or diagnosis with an opportunistic infection in the current year.

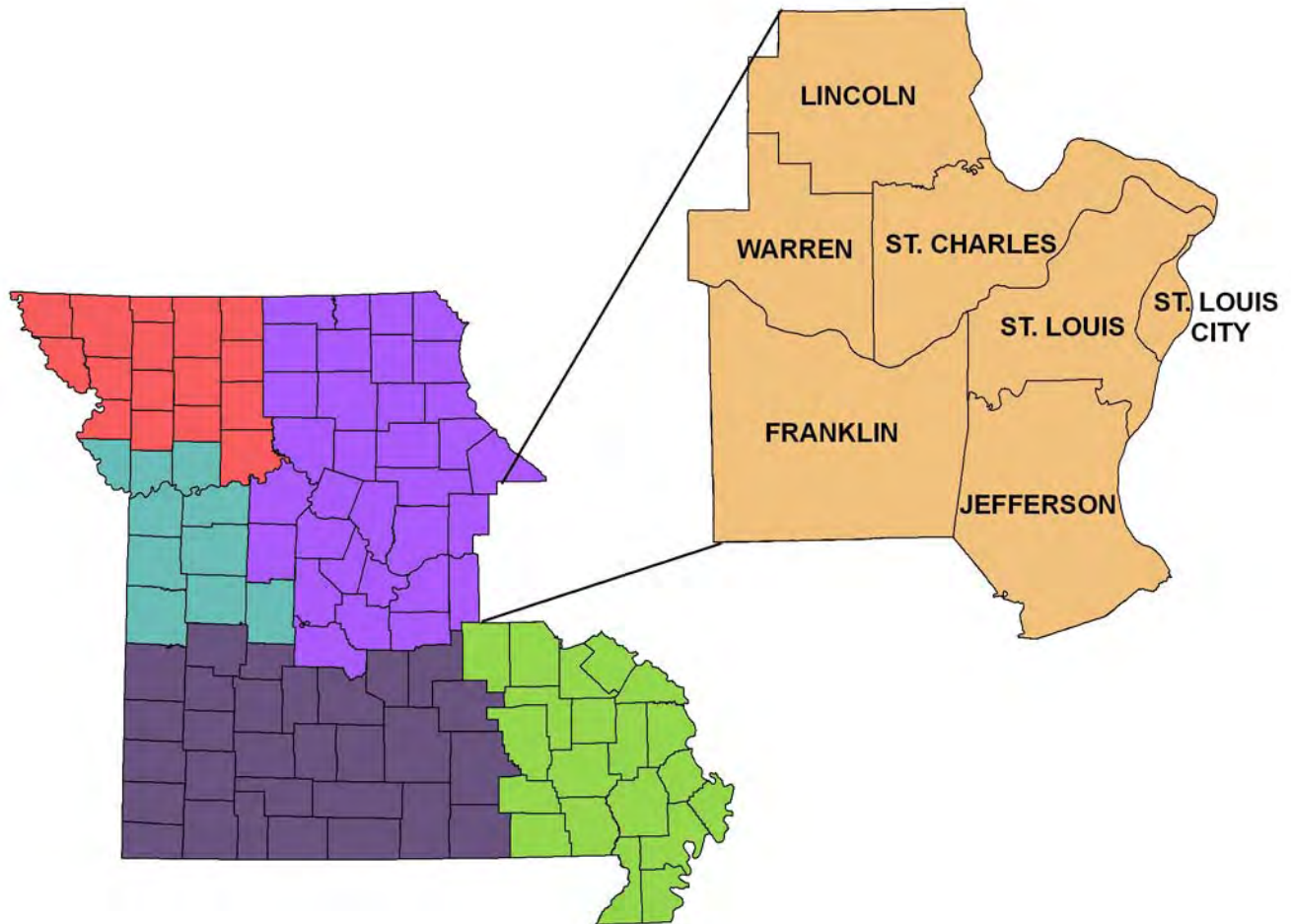
\*\*HIV case vs. AIDS case.

<sup>‡</sup>Based on age as of December 31, 2008.

Note: Rows with the percent marked '-.-' indicates that there were no living persons in the selected category.

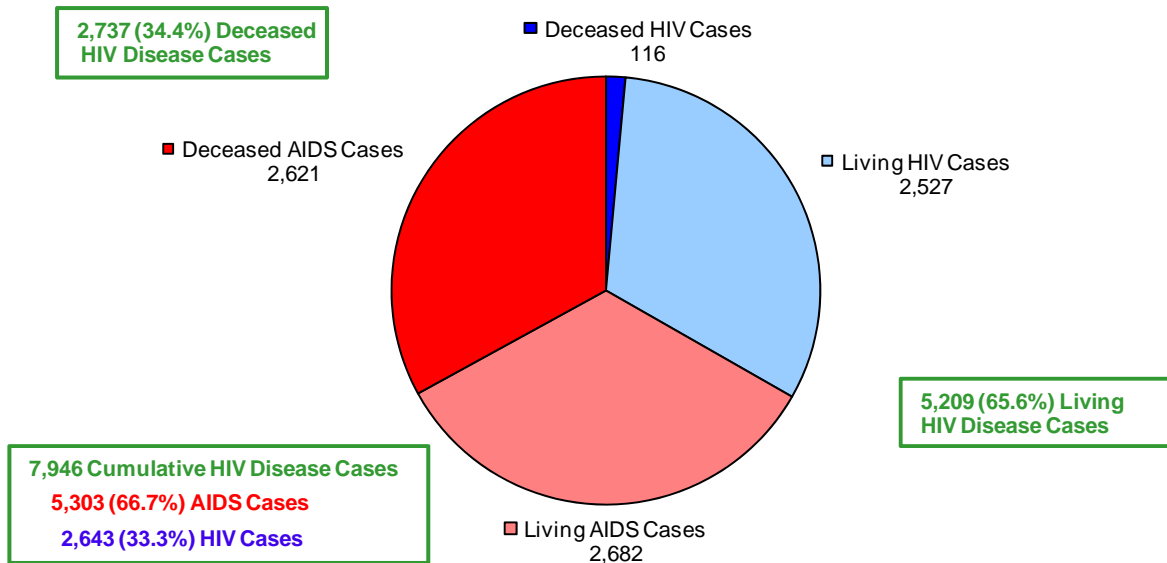
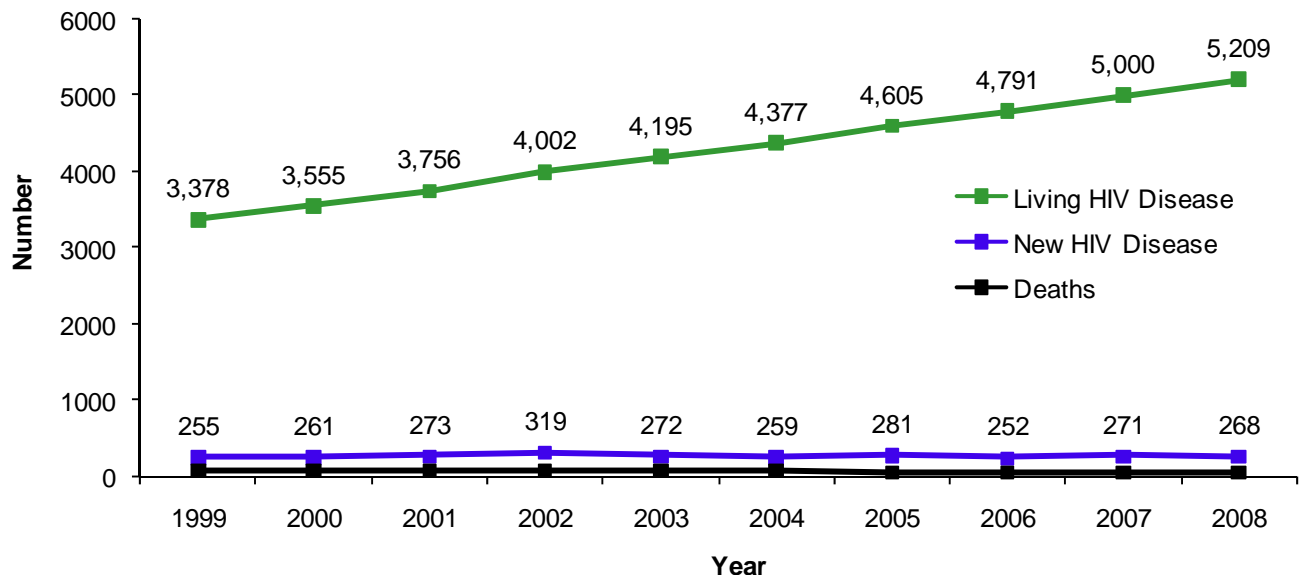
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# ST. LOUIS REGION



**Population Estimates, St. Louis HIV Region, 2007**

County	White		Black		Hispanic		American Indian		Asian		Total
Franklin County	97,082	97.0%	1,161	1.2%	1,060	1.1%	307	0.3%	435	0.4%	100,045
Jefferson County	207,742	96.1%	2,956	1.4%	2,956	1.4%	726	0.3%	1,696	0.8%	216,076
Lincoln County	49,034	95.2%	1,300	2.5%	867	1.7%	165	0.3%	162	0.3%	51,528
St. Charles County	313,537	91.2%	14,952	4.3%	7,796	2.3%	1,031	0.3%	6,636	1.9%	343,952
St. Louis County	718,836	72.2%	219,433	22.1%	21,366	2.1%	2,502	0.3%	32,981	3.3%	995,118
St. Louis City	157,458	44.9%	174,644	49.8%	9,406	2.7%	1,271	0.4%	7,980	2.3%	350,759
Warren County	28,739	94.3%	840	2.8%	652	2.1%	127	0.4%	109	0.4%	30,467
Region Total	1,572,428	75.3%	415,286	19.9%	44,103	2.1%	6,129	0.3%	49,999	2.4%	2,087,945

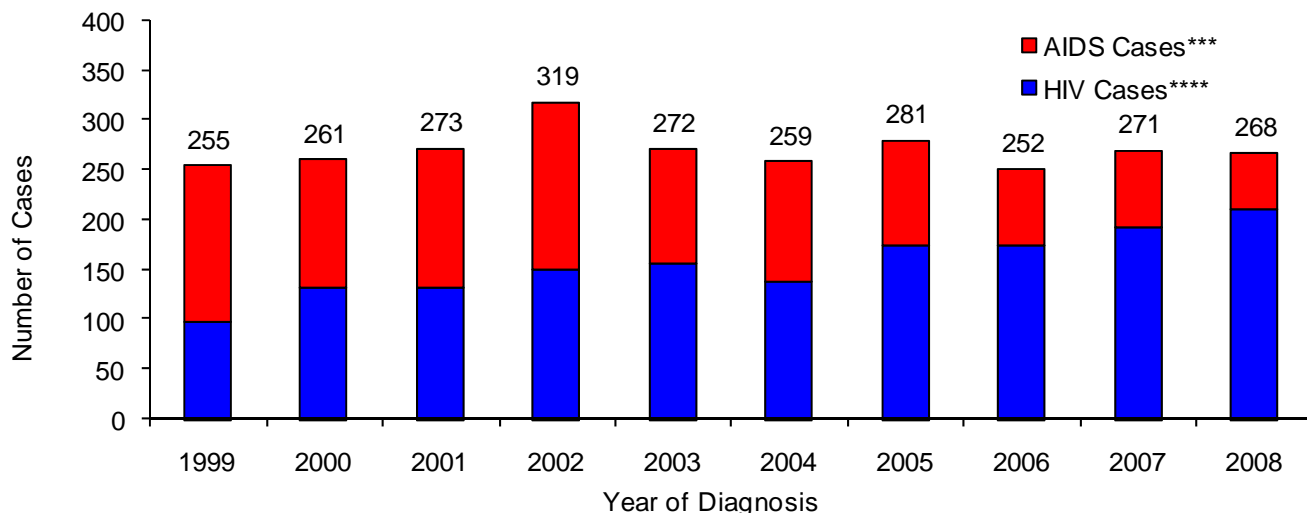
**Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, St. Louis HIV Region, 1982—2008****Figure 2. Living and new HIV disease cases and deaths by year\*, St. Louis HIV Region, 1999—2008**

\*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year; For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2008, there have been a total of 7,946 HIV disease cases diagnosed in the St. Louis HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 66% were still presumed to be living with HIV disease at the end of 2008. Among those living with HIV disease, 2,527 were classified as HIV cases at the end of 2008 and 2,682 were classified as AIDS cases.

At the end of 2008, there were 5,209 persons living with HIV disease whose most recent diagnosis occurred in the St. Louis region (Figure 2). The number of people living with HIV disease increased every year. There were 268 new HIV disease diagnoses in 2008. The number of new diagnoses has fluctuated slightly over time. The number of deaths among persons with HIV disease has remained generally steady.

**Figure 3. HIV disease cases, by current status\* and year of diagnosis\*\*, St. Louis HIV Region, 1999—2008**



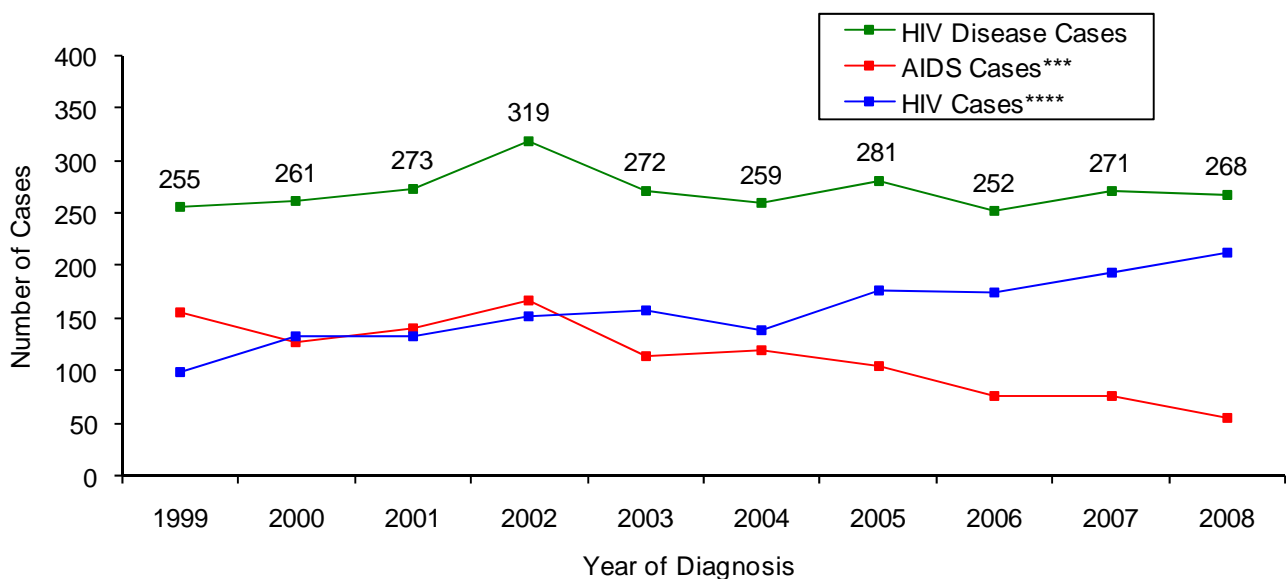
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

**Figure 4. Reported HIV disease cases, by current status\* and year of diagnosis\*\*, St. Louis HIV Region, 1999—2008**



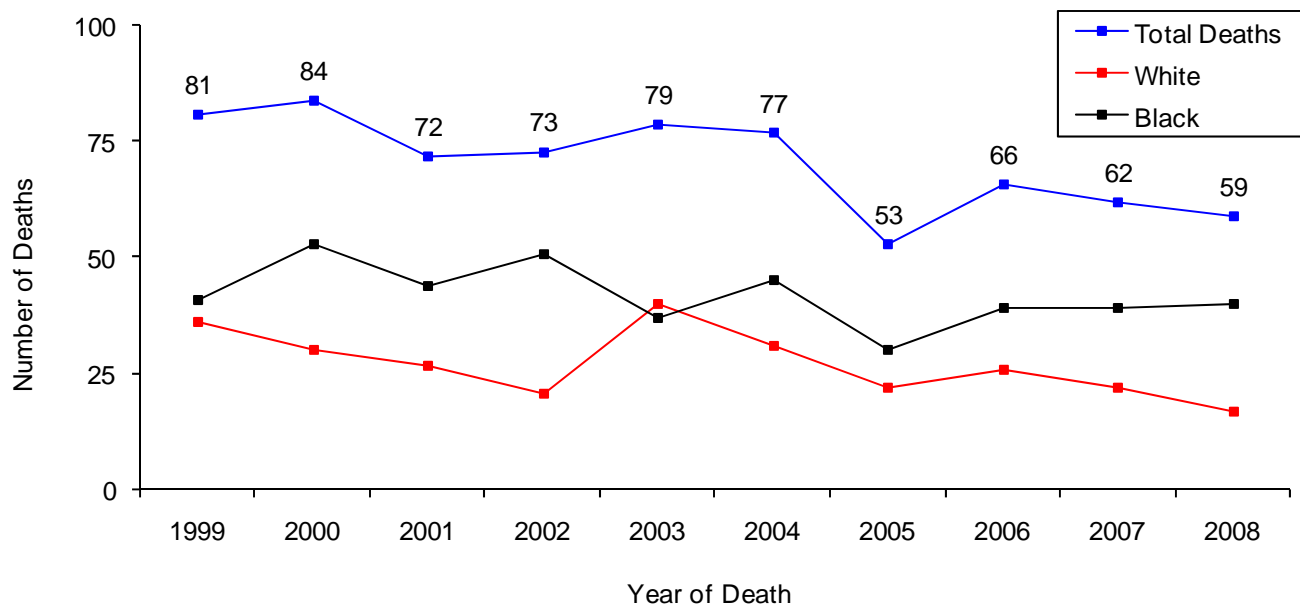
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

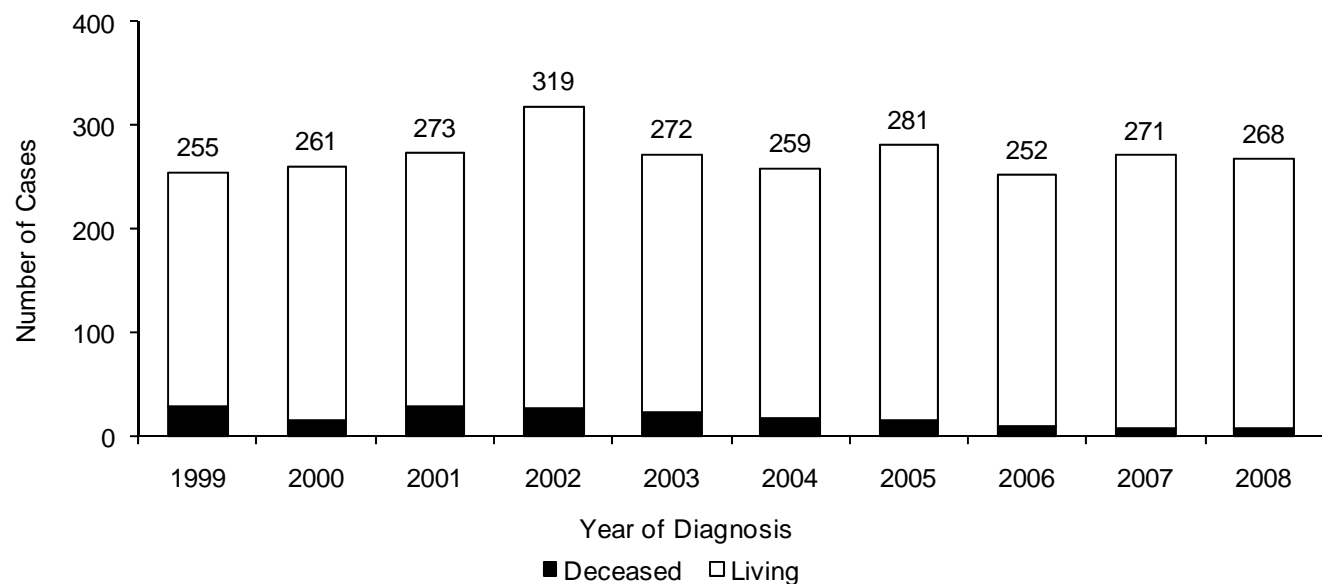
\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

The number of new diagnoses has remained fairly stable from 1999 to 2008, with increases observed in 2002 and 2005. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

**Figure 5. HIV disease deaths\*, by selected race, by year of death, St. Louis HIV Region, 1999—2008**

\*Includes deaths that have occurred among those diagnosed with HIV disease in the St. Louis HIV region.

†Only includes deaths through December 31, 2008, and reported by February 25, 2009.

**Figure 6. Persons diagnosed with HIV disease by current vital status\* and year of diagnosis\*\*, St. Louis HIV Region, 1999—2008**

\*Vital status on December 31, 2008.

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

The number of deaths among persons with HIV disease generally decreased from 1999-2005, increased from 2005-2006, and then decreased through 2008 (Figure 5). The general decrease in the number of deaths over time is likely related to the use of highly active antiretroviral therapy (HAART).

Of the 255 persons diagnosed with HIV disease in 1999, 29 (11%) were deceased by the end of 2008 (Figure 6). Among the 268 individuals first diagnosed in 2008, 8 (3%) were deceased at the end of 2008. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

**Table 1. Living<sup>†</sup> HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, St. Louis HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
<b>Sex</b>									
Male	2,048	81.0%	203.3	2,286	85.2%	226.9	4,334	83.2%	430.1
Female	479	19.0%	44.3	396	14.8%	36.7	875	16.8%	81.0
Total	2,527	100.0%	121.0	2,682	100.0%	128.5	5,209	100.0%	249.5
<b>Race/Ethnicity</b>									
White	1,091	43.2%	69.4	1,226	45.7%	78.0	2,317	44.5%	147.4
Black	1,321	52.3%	318.1	1,387	51.7%	334.0	2,708	52.0%	652.1
Hispanic	71	2.8%	161.0	46	1.7%	104.3	117	2.2%	265.3
Asian	11	0.4%	22.0	9	0.3%	18.0	20	0.4%	40.0
American Indian	2	0.1%	32.6	2	0.1%	32.6	4	0.1%	65.3
Other/Unknown	31	1.2%	N/A	12	0.4%	N/A	43	0.8%	N/A
Total	2,527	100.0%	121.0	2,682	100.0%	128.5	5,209	100.0%	249.5
<b>Race/Ethnicity-Males</b>									
White Male	979	47.8%	127.5	1,142	50.0%	148.7	2,121	48.9%	276.1
Black Male	978	47.8%	516.3	1,087	47.6%	573.9	2,065	47.6%	1090.2
Hispanic Male	55	2.7%	239.5	39	1.7%	169.8	94	2.2%	409.4
Asian Male	9	0.4%	37.3	6	0.3%	24.9	15	0.3%	62.2
American Indian Male	2	0.1%	67.2	2	0.1%	67.2	4	0.1%	134.5
Other/Unknown Male	25	1.2%	N/A	10	0.4%	N/A	35	0.8%	N/A
Total	2,048	100.0%	203.3	2,286	100.0%	226.9	4,334	100.0%	430.1
<b>Race/Ethnicity-Females</b>									
White Female	112	23.4%	13.9	84	21.2%	10.4	196	22.4%	24.4
Black Female	343	71.6%	151.9	300	75.8%	132.8	643	73.5%	284.7
Hispanic Female	16	3.3%	75.7	7	1.8%	33.1	23	2.6%	108.8
Asian Female	2	0.4%	7.7	3	0.8%	11.6	5	0.6%	19.3
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	6	1.3%	N/A	2	0.5%	N/A	8	0.9%	N/A
Total	479	100.0%	44.3	396	100.0%	36.7	875	100.0%	81.0
<b>Current Age<sup>‡</sup></b>									
<2	1	0.0%	1.8	0	0.0%	0.0	1	0.0%	1.8
2-12	16	0.6%	5.3	2	0.1%	0.7	18	0.3%	6.0
13-18	22	0.9%	11.9	11	0.4%	6.0	33	0.6%	17.9
19-24	176	7.0%	107.8	35	1.3%	21.4	211	4.1%	129.2
25-44	1,286	50.9%	233.4	1,119	41.7%	203.1	2,405	46.2%	436.5
45-64	941	37.2%	164.8	1,387	51.7%	242.9	2,328	44.7%	407.6
65+	85	3.4%	32.5	128	4.8%	48.9	213	4.1%	81.4
Total	2,527	100.0%	121.0	2,682	100.0%	128.5	5,209	100.0%	249.5

<sup>†</sup>Includes persons diagnosed with HIV disease in the St. Louis HIV Region who are currently living, regardless of current residence.

\*Cases which remained HIV cases at the end of 2008.

\*\*Cases classified as AIDS by December 31, 2008.

\*\*\*The sum of HIV cases and AIDS cases.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

<sup>‡</sup>Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

**Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, St. Louis HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>
<b>Sex</b>									
Male	167	78.8%	16.6	45	80.4%	4.5	212	79.1%	21.0
Female	45	21.2%	4.2	11	19.6%	1.0	56	20.9%	5.2
Total	212	100.0%	10.2	56	100.0%	2.7	268	100.0%	12.8
<b>Race/Ethnicity</b>									
White	75	35.4%	4.8	16	28.6%	1.0	91	34.0%	5.8
Black	127	59.9%	30.6	37	66.1%	8.9	164	61.2%	39.5
Hispanic	8	3.8%	18.1	0	0.0%	0.0	8	3.0%	18.1
Asian	1	0.5%	2.0	1	1.8%	2.0	2	0.7%	4.0
American Indian	0	0.0%	0.0	1	1.8%	16.3	1	0.4%	16.3
Other/Unknown	1	0.5%	N/A	1	1.8%	N/A	2	0.7%	N/A
Total	212	100.0%	10.2	56	100.0%	2.7	268	100.0%	12.8
<b>Race/Ethnicity-Males</b>									
White Male	69	41.3%	9.0	14	31.1%	1.8	83	39.2%	10.8
Black Male	89	53.3%	47.0	28	62.2%	14.8	117	55.2%	61.8
Hispanic Male	7	4.2%	30.5	0	0.0%	0.0	7	3.3%	30.5
Asian Male	1	0.6%	4.1	1	2.2%	4.1	2	0.9%	8.3
American Indian Male	0	0.0%	0.0	1	2.2%	33.6	1	0.5%	33.6
Other/Unknown Male	1	0.6%	N/A	1	2.2%	N/A	2	0.9%	N/A
Total	167	100.0%	16.6	45	100.0%	4.5	212	100.0%	21.0
<b>Race/Ethnicity-Females</b>									
White Female	6	13.3%	0.7	2	18.2%	0.2	8	14.3%	1.0
Black Female	38	84.4%	16.8	9	81.8%	4.0	47	83.9%	20.8
Hispanic Female	1	2.2%	4.7	0	0.0%	0.0	1	1.8%	4.7
Asian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	45	100.0%	4.2	11	100.0%	1.0	56	100.0%	5.2
<b>Current Age<sup>†</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	7	3.3%	3.8	0	0.0%	0.0	7	2.6%	3.8
19-24	51	24.1%	31.2	8	14.3%	4.9	59	22.0%	36.1
25-44	108	50.9%	19.6	28	50.0%	5.1	136	50.7%	24.7
45-64	46	21.7%	8.1	19	33.9%	3.3	65	24.3%	11.4
65+	0	0.0%	0.0	1	1.8%	0.4	1	0.4%	0.4
Total	212	100.0%	10.2	56	100.0%	2.7	268	100.0%	12.8

\*HIV cases diagnosed during 2008 which remained HIV cases at the end of the year.

\*\*AIDS cases initially diagnosed in 2008.

\*\*\*The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2008 with HIV, which progressed to AIDS in 2008.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

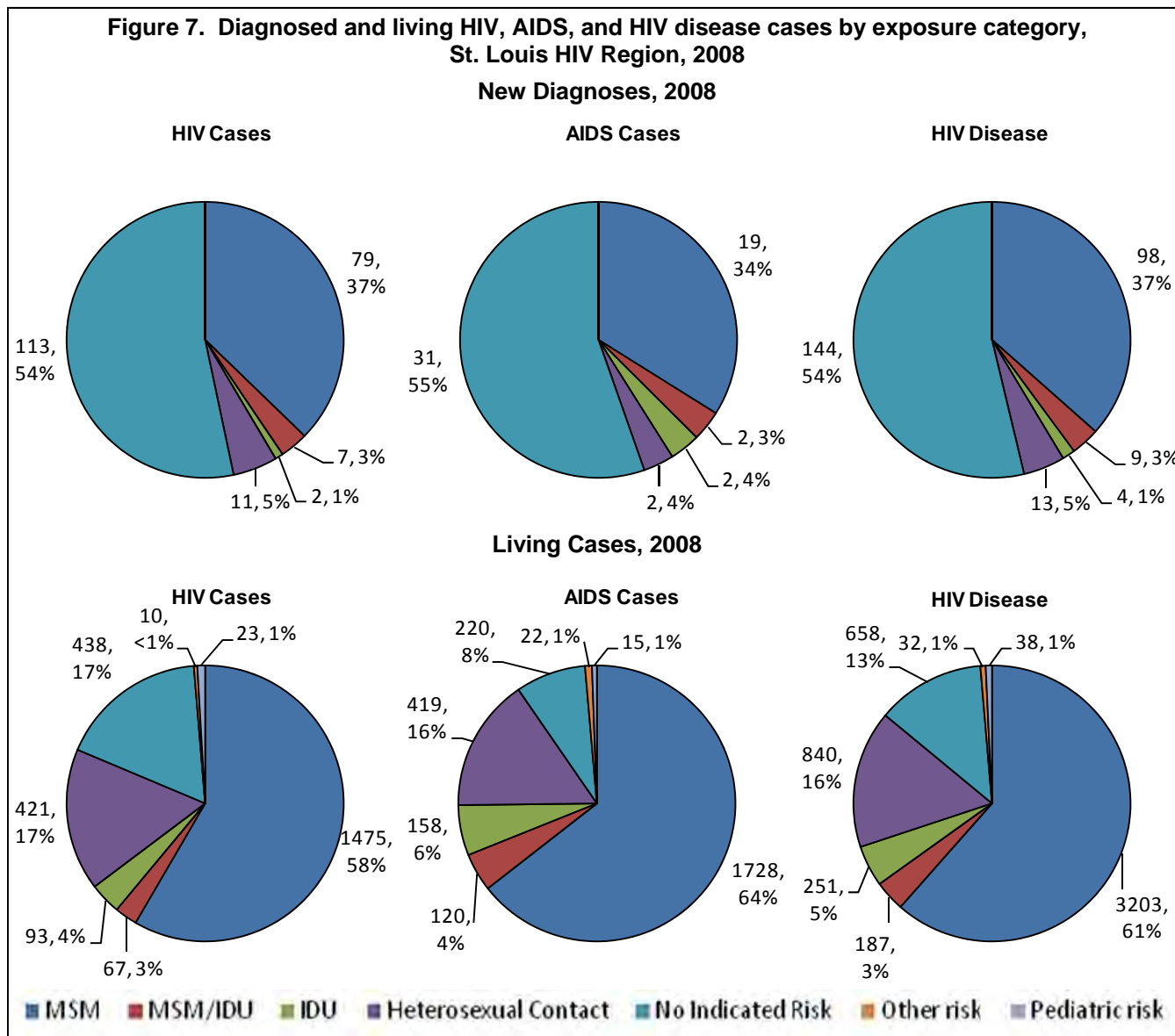
†Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

## Epi Profiles Summary: St. Louis HIV Region

Of the 5,209 persons living with HIV at the end of 2008, 83% were males (Table 1). The rate of those living with HIV disease was 5.3 times greater among males than females. Blacks represented the largest number of persons living with HIV disease in the St. Louis HIV region. In contrast, whites represented the largest number of persons living with HIV disease in all other HIV regions. The rate of persons living with HIV disease was 4.4 times greater among blacks than whites. The rate was 1.8 times greater among Hispanics than whites. Among males, the rate of individuals living with HIV disease was 3.9 times greater for blacks than whites, and 1.5 times greater for Hispanics than whites. Among females, the rate of those living with HIV disease was 11.7 times greater among blacks than whites, and 4.5 times greater among Hispanics than whites.

Of the 268 persons newly diagnosed with HIV disease in 2008, 21% were classified as AIDS cases by the end of 2008 (Table 2). The rate of new HIV disease diagnoses was 4.0 times greater in males than females. Blacks represented a greater proportion of the new AIDS cases compared to new HIV cases. The rate of new HIV disease cases was 6.8 times greater among blacks than whites, and 3.1 times greater among Hispanics than whites. The disproportionate impact of HIV disease on minorities appears to be greater for new diagnoses compared to those currently living with the disease in the St. Louis HIV region.



Among all categories, the largest proportion of cases with a known risk was attributed to MSM (Figure 7). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

**Table 3. New and living HIV and AIDS cases and rates, by geographic area, St. Louis HIV Region, 2008**

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2008*			Living			Diagnosed 2008**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
St. Louis City	109	51.4%	31.1	1,554	61.5%	443.0	39	69.6%	11.1	1,667	62.2%	475.3
St. Louis County	89	42.0%	8.9	807	31.9%	81.1	15	26.8%	1.5	828	30.9%	83.2
St. Charles County	7	3.3%	2.0	85	3.4%	24.7	1	1.8%	0.3	86	3.2%	25.0
Remainder of Region	7	3.3%	1.8	81	3.2%	20.3	1	1.8%	0.3	101	3.8%	25.4
<b>ST LOUIS HIV REGION TOTAL</b>	<b>212</b>	<b>100.0%</b>	<b>10.2</b>	<b>2,527</b>	<b>100.0%</b>	<b>121.0</b>	<b>56</b>	<b>100.0%</b>	<b>2.7</b>	<b>2,682</b>	<b>100.0%</b>	<b>128.5</b>

\*HIV cases diagnosed and reported to the Department during 2008 which remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

Note: Percentages may not total due to rounding.

**Table 4. Diagnosed HIV cases and rates, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2008**

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
St. Louis City	35	32.1%	22.2	69	63.3%	39.5	3	2.8%	31.9	109	100.0%	31.1
St. Louis County	31	34.8%	4.3	54	60.7%	24.6	4	4.5%	18.7	89	100.0%	8.9
St. Charles County	4	57.1%	1.3	3	42.9%	20.1	0	0.0%	0.0	7	100.0%	2.0
Remainder of Region	5	71.4%	1.3	1	14.3%	16.0	1	14.3%	18.1	7	100.0%	1.8
<b>ST LOUIS HIV REGION TOTAL</b>	<b>75</b>	<b>35.4%</b>	<b>4.8</b>	<b>127</b>	<b>59.9%</b>	<b>30.6</b>	<b>8</b>	<b>0.0%</b>	<b>18.1</b>	<b>212</b>	<b>100.0%</b>	<b>10.2</b>

\*Per 100,000 population based on 2007 MDHSS estimates.

\*\*Includes cases in persons whose race/ethnicity is either unknown or not listed.

Note: Row percentages are shown. Percentages may not total due to rounding.

**Table 5. Diagnosed AIDS cases and rates, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2008**

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
St. Louis City	9	23.1%	5.7	29	74.4%	16.6	0	0.0%	0.0	39	100.0%	11.1
St. Louis County	6	40.0%	0.8	7	46.7%	3.2	0	0.0%	0.0	15	100.0%	1.5
St. Charles County	0	0.0%	0.0	1	100.0%	6.7	0	0.0%	0.0	1	100.0%	0.3
Remainder of Region	1	100.0%	0.3	0	0.0%	0.0	0	0.0%	0.0	1	100.0%	0.3
<b>ST LOUIS HIV REGION TOTAL</b>	<b>16</b>	<b>28.6%</b>	<b>1.0</b>	<b>37</b>	<b>66.1%</b>	<b>8.9</b>	<b>0</b>	<b>0.0%</b>	<b>0.0</b>	<b>56</b>	<b>100.0%</b>	<b>2.7</b>

\*Per 100,000 population based on 2007 MDHSS estimates.

\*\*Includes cases in persons whose race/ethnicity is either unknown or not listed.

Note: Row percentages are shown. Percentages may not total due to rounding.

The rates of new diagnoses and living cases were higher in St. Louis City compared to other areas in the St. Louis HIV region (Table 3). Those diagnosed in St. Louis City represented a greater proportion of the new AIDS cases (70%) compared to the new HIV cases (51%).

There were differences in the proportion of new HIV cases diagnosed by race/ethnicity among the geographic areas (Table 4). Greater proportions of the new HIV cases diagnosed in St. Louis City and St. Louis County were black compared to St. Charles County and the remainder of the HIV region.

There were also differences in the proportion of new AIDS cases diagnosed by race/ethnicity among the geographic areas (Table 5). The proportion of newly diagnosed AIDS cases that occurred among blacks was higher for St. Louis City compared to St. Louis County.

**Table 6. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, St. Louis HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	25	31.6%	773	52.4%	7	36.8%	940	54.4%
Black	50	63.3%	641	43.5%	12	63.2%	745	43.1%
Hispanic	3	3.8%	45	3.1%	0	0.0%	30	1.7%
Other/Unknown	1	1.3%	16	1.1%	0	0.0%	13	0.8%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>79</b>	<b>100.0%</b>	<b>1,475</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>	<b>1,728</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 7. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, St. Louis HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
13-18	0	0.0%	9	0.6%	0	0.0%	9	0.3%
19-24	18	1.1%	105	7.6%	2	2.7%	126	3.9%
25-44	641	37.4%	712	51.4%	49	65.3%	1,419	44.3%
45-64	962	56.2%	525	37.9%	21	28.0%	1,519	47.4%
65+	92	5.4%	35	2.5%	3	4.0%	130	4.1%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>1,713</b>	<b>100.0%</b>	<b>1,386</b>	<b>100.0%</b>	<b>75</b>	<b>100.0%</b>	<b>3,203</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 8. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	1,024	51.1%	929	46.3%	33	1.6%	2,005	62.6%
St. Louis County	534	52.6%	435	42.8%	38	3.7%	1,016	31.7%
St. Charles County	84	84.0%	13	13.0%	2	2.0%	100	3.1%
Remaining Counties	71	86.6%	9	11.0%	2	2.4%	82	2.6%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>1,713</b>	<b>53.5%</b>	<b>1,386</b>	<b>43.3%</b>	<b>75</b>	<b>2.3%</b>	<b>3,203</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race/ethnicity in each area.

\*\*\*Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of 98 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2008 for the St. Louis HIV region (Table 6). Blacks represented the greatest proportion of new HIV and AIDS cases diagnosed in 2008 among MSM. Of the newly diagnosed cases among MSM, 19% progressed to AIDS by the end of 2008. Among MSM living with HIV disease, whites represented the largest proportion of living HIV and AIDS cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 7). Among white MSM living with HIV disease, the majority (56%) were between 45-64 years of age at the end of 2008. In contrast, the majority of black (51%) and Hispanic (65%) MSM living with HIV disease were between 25-44 years of age.

There were differences in the distribution of persons living with HIV disease by race/ethnicity among the geographic areas for MSM (Table 8). Black MSM comprised a larger proportion of persons living with HIV disease in St. Louis City and St. Louis County compared to other areas.

**Table 9. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, St. Louis HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	4	57.1%	28	41.8%	2	100.0%	62	51.7%
Black	3	42.9%	37	55.2%	0	0.0%	58	48.3%
Hispanic	0	0.0%	1	1.5%	0	0.0%	0	0.0%
Other/Unknown	0	0.0%	1	1.5%	0	0.0%	0	0.0%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>7</b>	<b>100.0%</b>	<b>67</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>120</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 10. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, St. Louis HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	1.1%	3	3.2%	0	0.0%	4	2.1%
25-44	31	34.4%	31	32.6%	1	100.0%	63	33.7%
45-64	54	60.0%	58	61.1%	0	0.0%	113	60.4%
65+	4	4.4%	3	3.2%	0	0.0%	7	3.7%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>90</b>	<b>100.0%</b>	<b>95</b>	<b>100.0%</b>	<b>1</b>	<b>100.0%</b>	<b>187</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 11. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	54	41.2%	75	57.3%	1	0.8%	131	70.1%
St. Louis County	24	55.8%	19	44.2%	0	0.0%	43	23.0%
St. Charles County	7	87.5%	1	12.5%	0	0.0%	8	4.3%
Remaining Counties	5	100.0%	0	0.0%	0	0.0%	5	2.7%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>90</b>	<b>48.1%</b>	<b>95</b>	<b>50.8%</b>	<b>1</b>	<b>0.5%</b>	<b>187</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race/ethnicity in each area.

\*\*\*Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of nine new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2008 for the St. Louis HIV region (Table 9). There were 187 living HIV disease cases attributed to MSM/IDU at the end of 2008 in the St. Louis HIV region. The largest proportion of living HIV cases were black, whereas whites represented the largest proportion of living AIDS cases.

The majority of persons living with HIV disease among both white and black MSM/IDU were 45-64 years old at the end of 2008 (Table 10).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM/IDU (Table 11). Black MSM/IDU comprised a larger proportion of living cases in St. Louis City and St. Louis County compared to other areas.

**Table 12. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, St. Louis HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	22	23.7%	0	0.0%	27	17.1%
Black Male	1	50.0%	39	41.9%	2	100.0%	73	46.2%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	1	0.6%
White Female	0	0.0%	15	16.1%	0	0.0%	15	9.5%
Black Female	1	50.0%	16	17.2%	0	0.0%	40	25.3%
Hispanic Female	0	0.0%	0	0.0%	0	0.0%	1	0.6%
<b>ST LOUIS HIV REGION TOTAL<sup>†</sup></b>	<b>2</b>	<b>100.0%</b>	<b>93</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>158</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 13. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, St. Louis HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	2.0%	0	0.0%	1	3.3%	0	0.0%	2	0.8%
25-44	18	36.7%	31	27.7%	15	50.0%	24	42.9%	89	35.5%
45-64	29	59.2%	75	67.0%	14	46.7%	29	51.8%	150	59.8%
65+	1	2.0%	6	5.4%	0	0.0%	3	5.4%	10	4.0%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>49</b>	<b>100.0%</b>	<b>112</b>	<b>100.0%</b>	<b>30</b>	<b>100.0%</b>	<b>56</b>	<b>100.0%</b>	<b>251</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 14. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	26	15.9%	136	82.9%	1	0.6%	164	65.3%
St. Louis County	21	38.9%	31	57.4%	1	1.9%	54	21.5%
St. Charles County	13	92.9%	1	7.1%	0	0.0%	14	5.6%
Remaining Counties	19	100.0%	0	0.0%	0	0.0%	19	7.6%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>79</b>	<b>31.5%</b>	<b>168</b>	<b>66.9%</b>	<b>2</b>	<b>0.8%</b>	<b>251</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race/ethnicity in each area.

\*\*\*Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of four new HIV disease diagnoses attributed to injecting drug users (IDU) in 2008 for the St. Louis HIV region (Table 12). There were 251 persons living with HIV disease attributed to IDU at the end of 2008 in the St. Louis HIV region. Black males represented the largest proportion of living HIV and AIDS cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity and sex among IDU (Table 13). Among white males, black males, and black females, the greatest proportion of living cases was 45-64 years of age at the end of 2008. Among white females, a nearly equal number of persons living with HIV disease were between 25-44 and 45-44 years of age.

There were differences in the distribution of individuals living with HIV disease by race/ethnicity among the geographic areas for IDU (Table 14). St. Louis City had the largest proportion of black IDU living with HIV disease (83%). St. Louis County had the second largest proportion of black IDU living with HIV disease (57%).

**Table 15. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, St. Louis HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	28	6.7%	0	0.0%	28	6.7%
Black Male	1	9.1%	77	18.3%	0	0.0%	97	23.2%
Hispanic Male	0	0.0%	1	0.2%	0	0.0%	4	1.0%
White Female	2	18.2%	74	17.6%	0	0.0%	57	13.6%
Black Female	8	72.7%	229	54.4%	2	100.0%	224	53.5%
Hispanic Female	0	0.0%	7	1.7%	0	0.0%	4	1.0%
<b>ST LOUIS HIV REGION TOTAL<sup>†</sup></b>	<b>11</b>	<b>100.0%</b>	<b>421</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>419</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 16. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, St. Louis HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	1	0.8%	2	0.4%	3	0.4%
19-24	0	0.0%	5	2.9%	0	0.0%	9	2.0%	14	1.7%
25-44	15	26.8%	87	50.0%	70	53.4%	299	66.0%	487	58.0%
45-64	31	55.4%	68	39.1%	53	40.5%	130	28.7%	292	34.8%
65+	10	17.9%	14	8.0%	7	5.3%	13	2.9%	44	5.2%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>56</b>	<b>100.0%</b>	<b>174</b>	<b>100.0%</b>	<b>131</b>	<b>100.0%</b>	<b>453</b>	<b>100.0%</b>	<b>840</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 17. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, St. Louis HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
St. Louis City	76	14.8%	424	82.7%	9	1.8%	513	61.1%
St. Louis County	67	24.6%	195	71.7%	5	1.8%	272	32.4%
St. Charles County	15	71.4%	4	19.0%	1	4.8%	21	2.5%
Remaining Counties	29	85.3%	4	11.8%	1	2.9%	34	4.0%
<b>ST LOUIS HIV REGION TOTAL</b>	<b>187</b>	<b>22.3%</b>	<b>627</b>	<b>74.6%</b>	<b>16</b>	<b>1.9%</b>	<b>840</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race in each area.

\*\*\*Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total 13 new HIV disease diagnoses attributed to heterosexual contact in 2008 for the St. Louis HIV region (Table 15). All but one of the newly diagnosed persons were females. There were 840 persons living with HIV disease attributed to heterosexual contact at the end of 2008 in the St. Louis HIV region. Black females represented the largest proportion of both living HIV and AIDS cases among heterosexual contact cases.

At the end of 2008, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age for white females, black males, and black females (Table 16). Among white males, the greatest proportion of individuals living with HIV disease was between 45-64 years of age.

There were differences in the distribution of individuals living with HIV disease by race/ethnicity among the geographic areas for heterosexual contact cases (Table 17). Black heterosexual contact cases comprised a larger proportion of living cases in St. Louis City and St. Louis County compared to other areas.

**Table 18. Newly diagnosed and living HIV and AIDS cases with exposure category assignments for St. Louis HIV Region, 2008**

Exposure category	HIV cases				AIDS cases			
	2008*		Living		2008**		Living	
<b>Adult/Adolescent</b>								
Men who have sex with men	149	70.3%	1,744	69.6%	38	67.9%	1,871	70.2%
Men who have sex with men and inject drugs	15	7.1%	80	3.2%	3	5.4%	130	4.9%
Injecting drug use	6	2.8%	114	4.6%	4	7.1%	175	6.6%
Heterosexual contact	42	19.8%	555	22.2%	11	19.6%	469	17.6%
Hemophilia/coagulation disorder	0	0.0%	9	0.4%	0	0.0%	22	0.8%
Blood transfusion or tissue recipient	0	0.0%	1	0.0%	0	0.0%	0	0.0%
No indicated risk (NIR)	-----	-----	-----	-----	-----	-----	-----	-----
<b>ADULT/ADOLESCENT SUBTOTAL</b>	<b>212</b>	<b>100.0%</b>	<b>2,504 †</b>	<b>100.0%</b>	<b>56</b>	<b>100.0%</b>	<b>2,667</b>	<b>100.0%</b>
<b>Pediatric (&lt;13 years old)</b>								
<b>PEDIATRIC SUBTOTAL</b>	<b>0</b>	<b>0.0%</b>	<b>23</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>15</b>	<b>100.0%</b>
<b>TOTAL</b>	<b>212</b>		<b>2,527</b>		<b>56</b>		<b>2,682</b>	

\*HIV cases reported during 2008 which remained HIV cases at the end of the year.

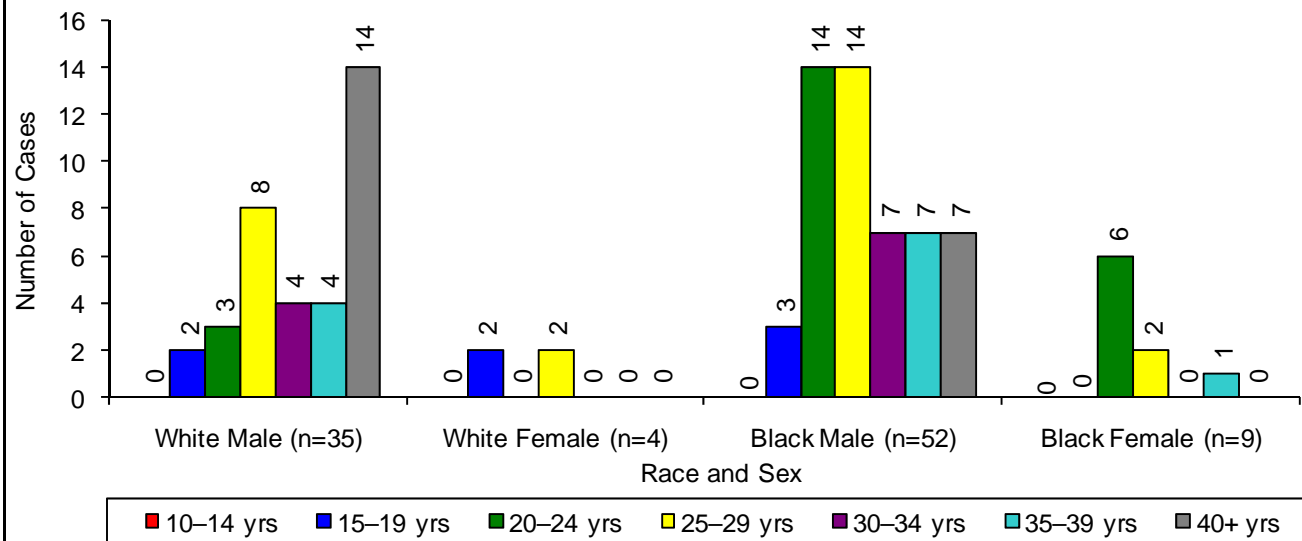
\*\*Does not include HIV cases that progressed to AIDS.

†Includes 1 case with a confirmed "other" exposure category.

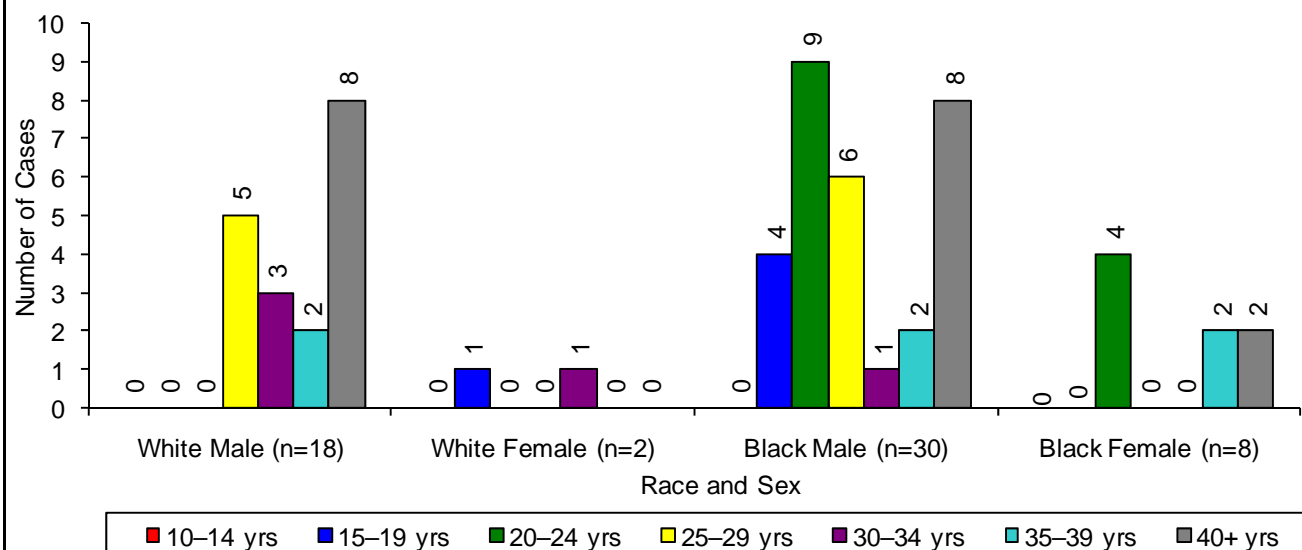
Note: Percentages may not total due to rounding.

The data in Table 18 have been adjusted to proportionately re-distribute individuals with no indicated risk factor based on sex and race/ethnicity to known exposure categories. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and AIDS cases, MSM represented the greatest proportion of cases. The proportion of new diagnoses attributed to MSM was greater for new HIV case diagnoses compared to the proportion among living HIV cases. No diagnoses were reported among children less than 13 years of age in 2008 in the St. Louis HIV region.

**Figure 8. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, St. Louis Region, 2008**

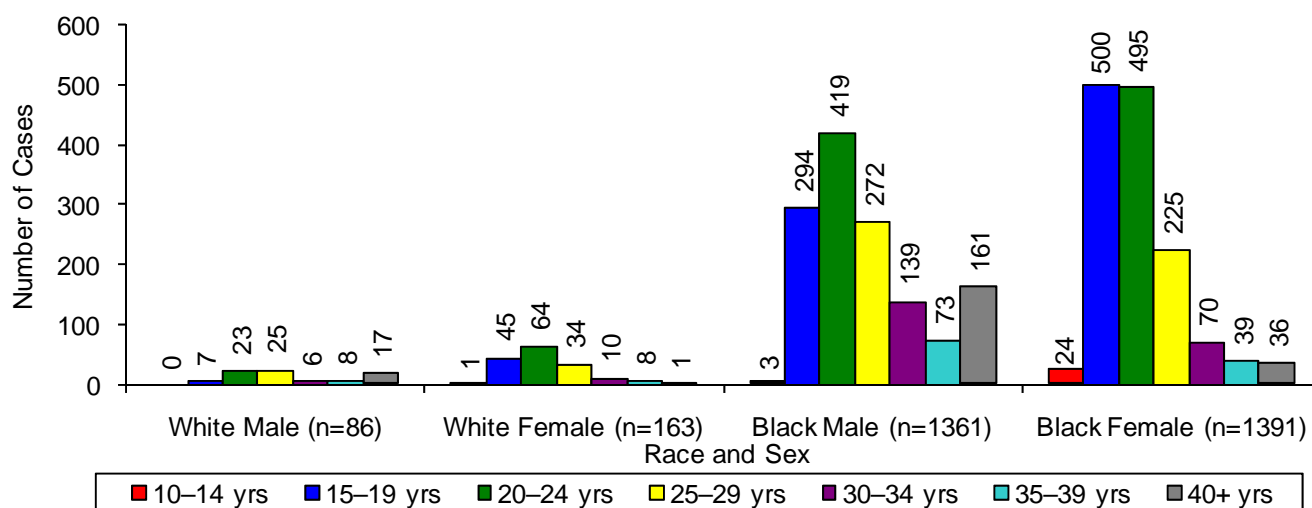


**Figure 9. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, St. Louis Region, 2008**

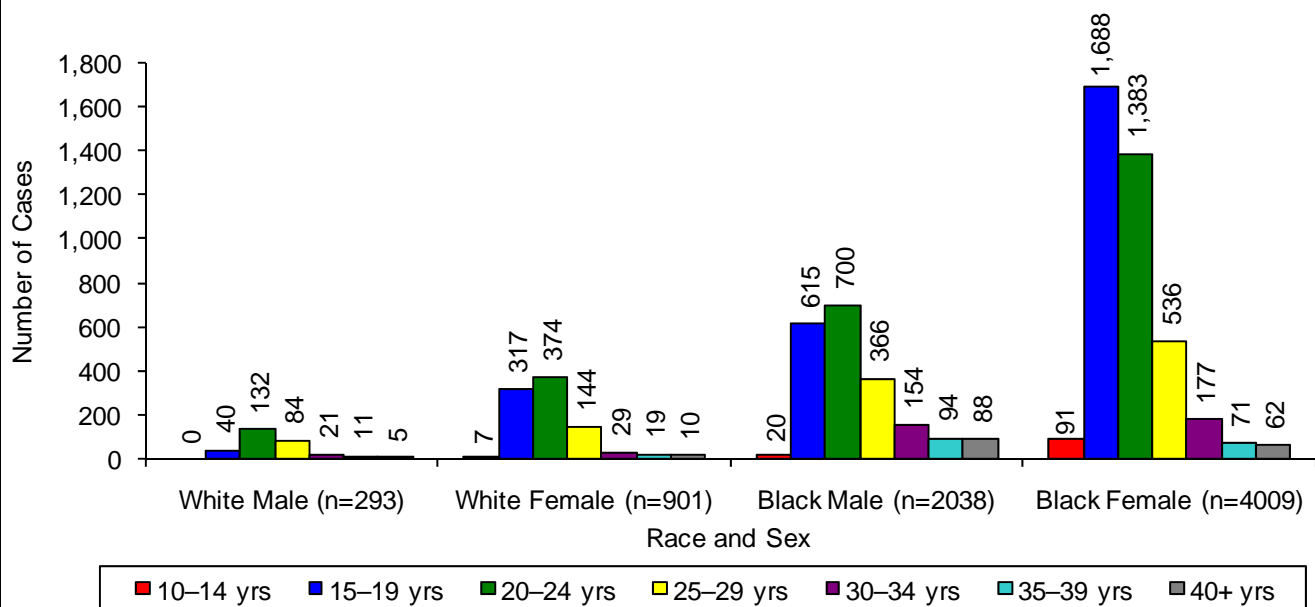


The largest number of P&S syphilis cases was reported among black males (52), followed by white males (35) (Figure 8). The number of reported cases decreased from 2007 to 2008 among black males (74 to 52), but increased among all other race/ethnicity and sex categories presented. There were differences in the distribution of reported cases by age at diagnosis among the race and sex categories. A greater proportion of diagnoses were 40 or more years old (40%) among white males compared to the other race/ethnicity and sex categories presented.

The largest number of early latent syphilis cases was reported among black males (30), followed by white males (18) (Figure 9). The number of reported early latent syphilis cases increased from 2007 to 2008 among white males (8 to 18), decreased among black males (32 to 30) and black females (9 to 8), and remained the same for white females. Among white males, individuals 40 or more years of age represented the greatest number of diagnoses. Among black males, a nearly equal number of cases was reported among individuals 20-24 and 40 or more years of age.

**Figure 10. Reported gonorrhea cases, by race and sex, by age group at diagnosis, St. Louis Region, 2008**

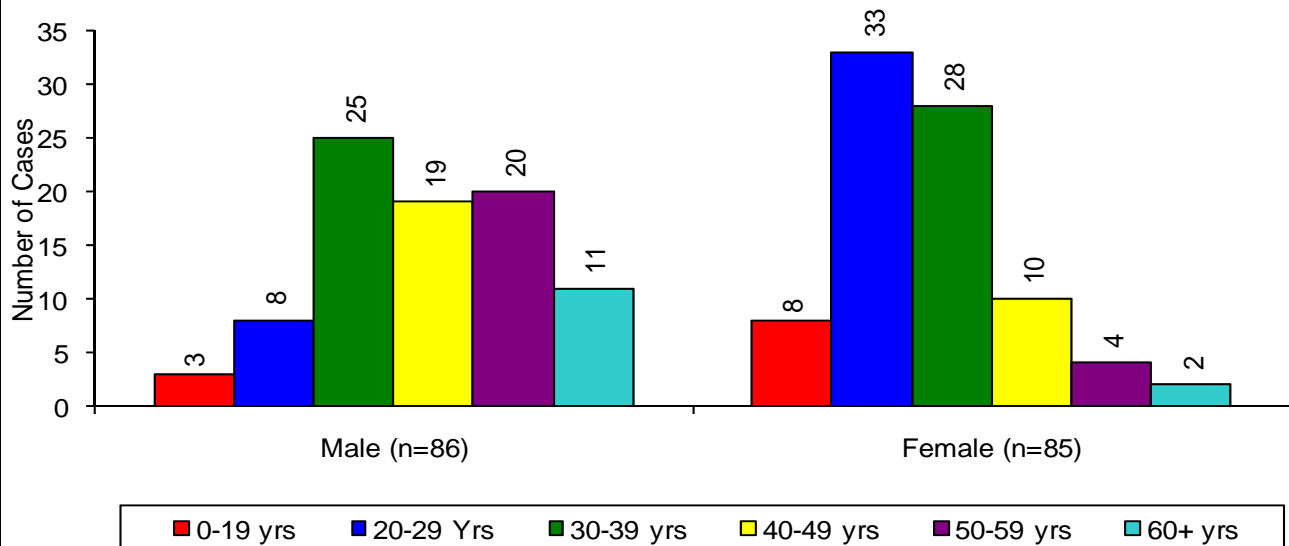
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

**Figure 11. Reported chlamydia cases, by race and sex, by age group at diagnosis, St. Louis Region, 2008**

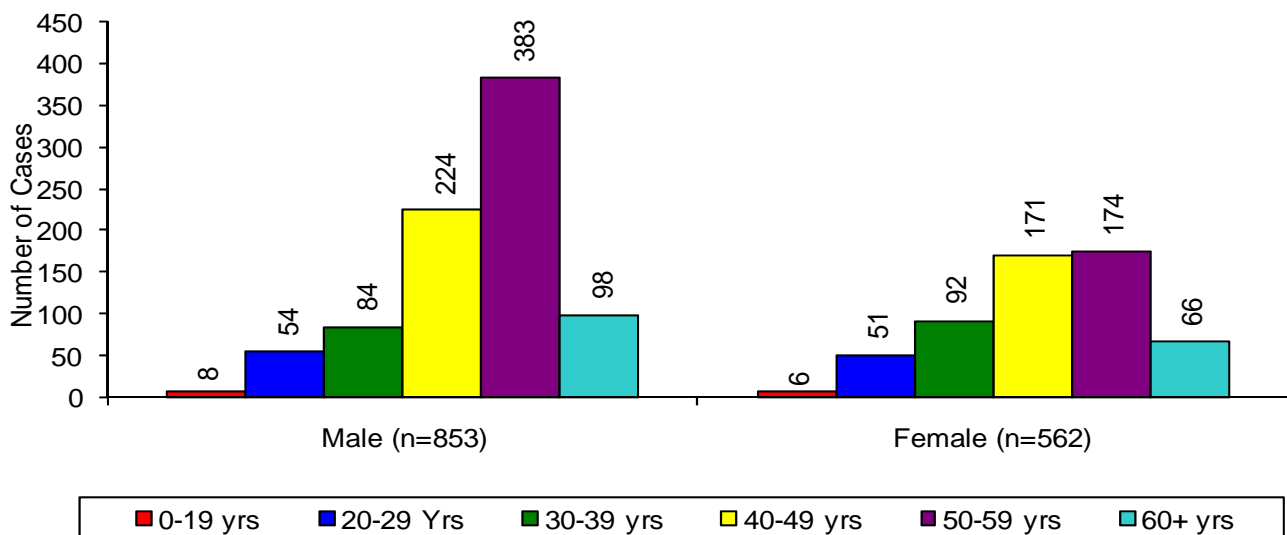
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among black females (1,391), followed by black males (1,361) (Figure 10). The number of reported cases decreased from 2007 to 2008 among all race/ethnicity and sex categories presented. Among black females, a nearly equal number of gonorrhea cases were reported among those 15-19 and 20-24 years of age. The largest number of cases was diagnosed between 20-24 years of age among white females and black males. A nearly equal number cases was diagnosed between 20-24 and 25-29 years of age among white males.

The largest number of chlamydia cases was reported among black females (4,009), followed by black males (2,038). The number of reported chlamydia cases increased from 2007 to 2008 among all race/ethnicity and sex categories presented. Among black females, individuals 15-19 years of age represented the largest number of reported cases. For all other race/ethnicity and sex categories presented, 20-24 years olds represented the largest number of diagnosed cases.

**Figure 12. Reported Hepatitis B cases, by sex and by age group at diagnosis, St. Louis Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

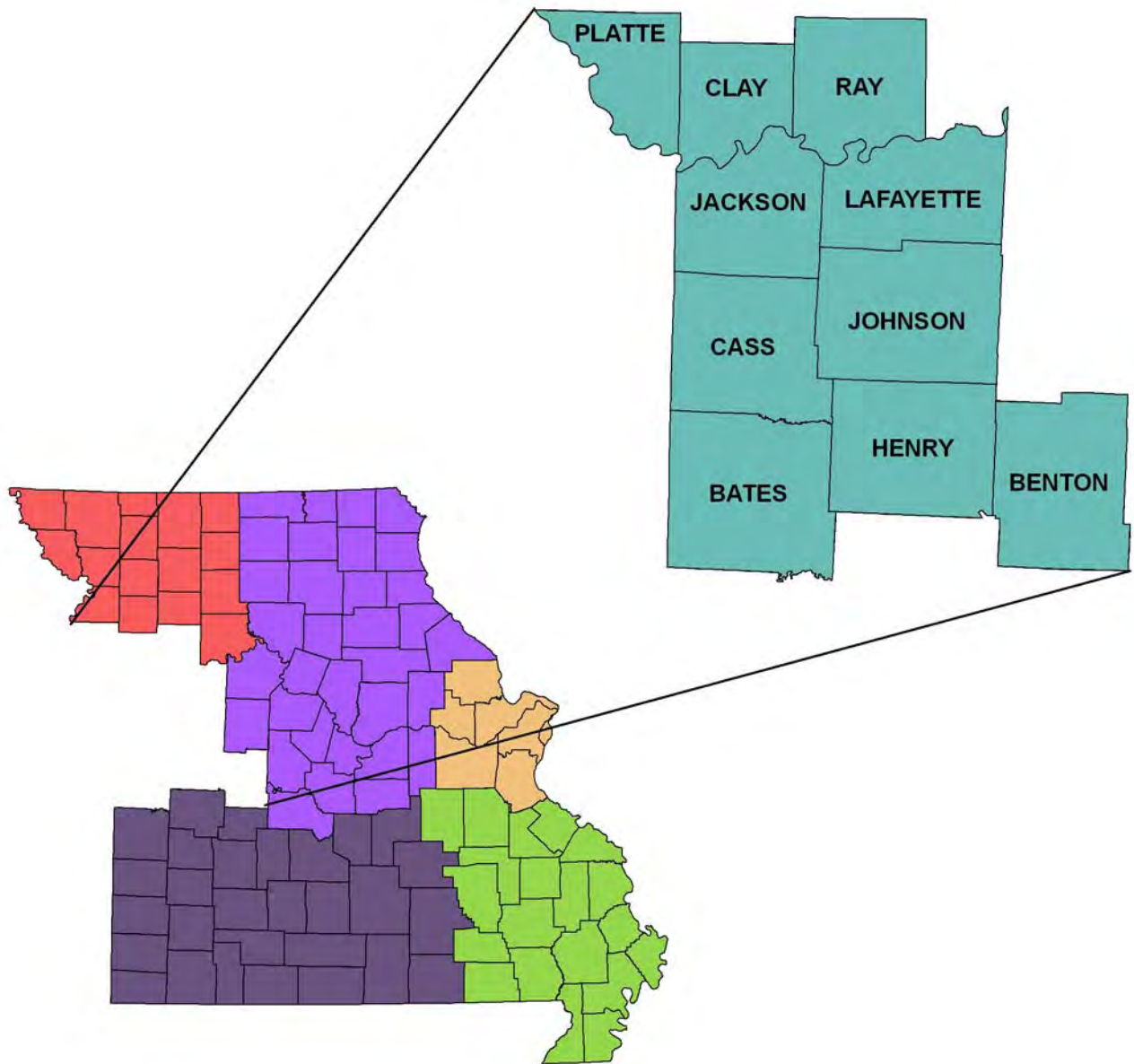
**Figure 13. Reported Hepatitis C cases, by sex and by age group at diagnosis, St. Louis Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

There were 171 reported cases of Hepatitis B in the St. Louis HIV region during 2008 (Figure 12). Females represented 50% of reported Hepatitis B cases. There were differences in the age distribution of reported Hepatitis B cases by sex. Among males, the largest proportion of cases was between 30-39 years of age at diagnosis. The largest proportion of cases was 20-29 years old among females.

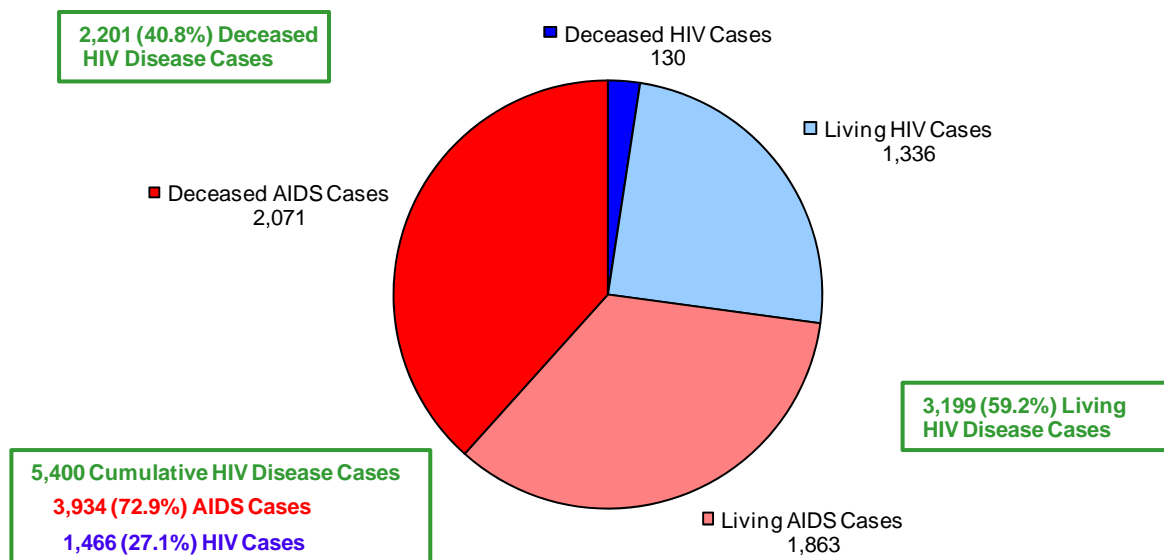
In 2008, there were 1,415 Hepatitis C cases reported in the St. Louis HIV region (Figure 13). Of the reported Hepatitis C cases, 60% were male. There were slight differences in the age at diagnosis of reported Hepatitis C cases by sex. Among males, the largest numbers of cases were between 50-59 years of age. A nearly equal number of diagnoses was reported for persons 40-49 and 50-59 years of age among females.

# KANSAS CITY REGION

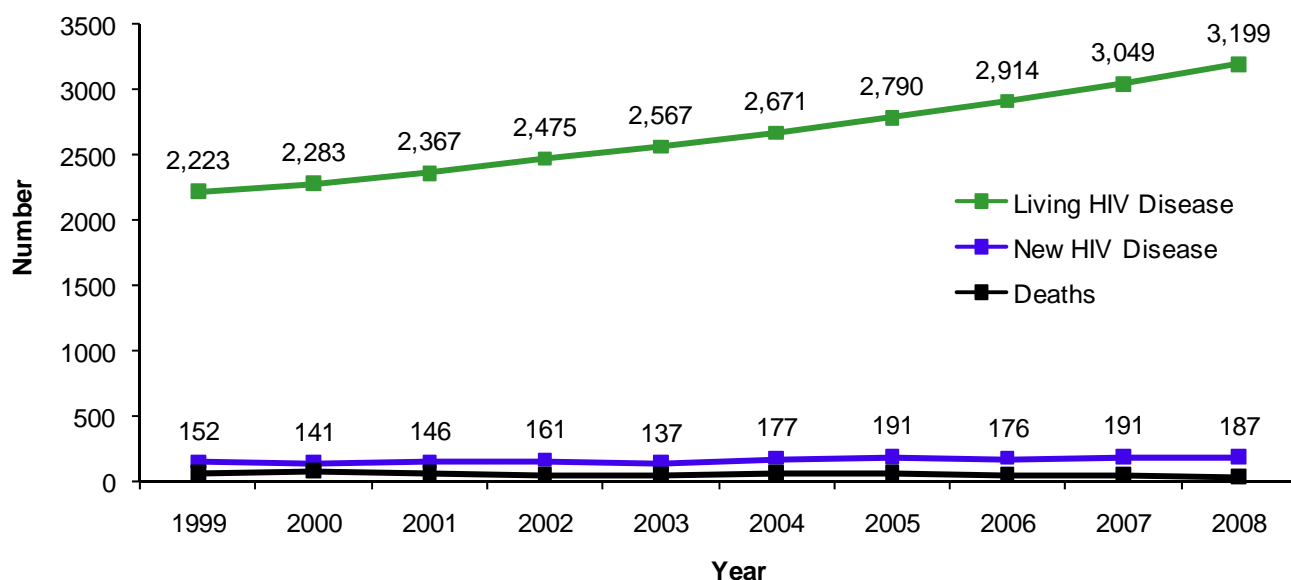


Population Estimates, Kansas City HIV Region, 2007												
County	White		Black		Hispanic		American Indian		Asian		Total	
Bates County	16,427	96.4%	174	1.0%	257	1.5%	120	0.7%	56	0.3%	17,034	
Benton County	17,997	97.4%	111	0.6%	219	1.2%	110	0.6%	33	0.2%	18,470	
Cass County	89,042	91.7%	3,513	3.6%	3,233	3.3%	595	0.6%	750	0.8%	97,133	
Clay County	186,014	87.8%	9,963	4.7%	10,235	4.8%	1,069	0.5%	4,671	2.2%	211,952	
Henry County	21,552	96.2%	313	1.4%	273	1.2%	177	0.8%	83	0.4%	22,398	
Jackson County	446,223	66.9%	154,851	23.2%	50,139	7.5%	3,530	0.5%	12,147	1.8%	666,890	
Johnson County	46,311	89.2%	2,345	4.5%	1,766	3.4%	358	0.7%	1,148	2.2%	51,928	
Lafayette County	31,107	95.2%	871	2.7%	449	1.4%	98	0.3%	152	0.5%	32,677	
Platte County	74,734	88.0%	4,424	5.2%	3,509	4.1%	425	0.5%	1,789	2.1%	84,881	
Ray County	22,549	96.0%	462	2.0%	300	1.3%	92	0.4%	79	0.3%	23,482	
Region Total	951,956	77.6%	177,027	14.4%	70,380	5.7%	6,574	0.5%	20,908	1.7%	1,226,845	

**Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Kansas City HIV Region, 1982—2008**



**Figure 2. Living and new HIV disease cases and deaths by year\*, Kansas City HIV Region, 1999—2008**

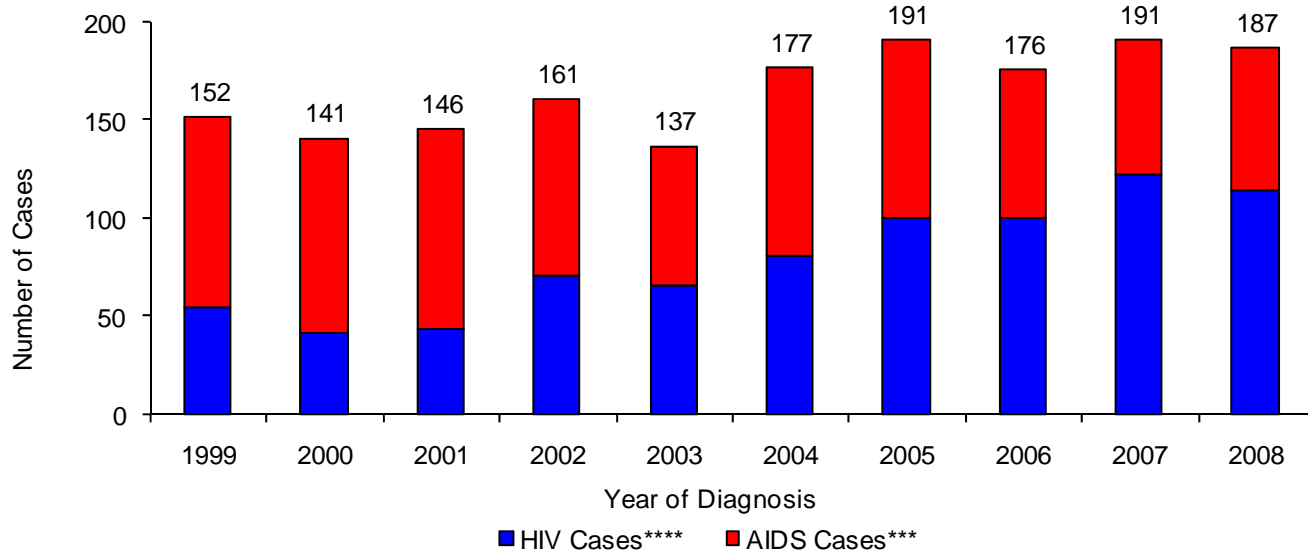


\*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2008, there have been a total of 5,400 HIV disease cases diagnosed in the Kansas City HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 59% were still presumed to be living with HIV disease at the end of 2008. Among those living with HIV disease, 1,336 were classified as HIV cases at the end of 2008 and 1,863 were classified as AIDS cases.

At the end of 2008, there were 3,199 persons living with HIV disease whose most recent diagnosis occurred in the Kansas City HIV region (Figure 2). The number of people living with HIV disease increased every year. There were 187 new HIV disease diagnoses in 2008. The median number of new diagnoses was greater for 2004-2008 compared to 1999-2003. The number of deaths among persons with HIV disease remained generally stable.

**Figure 3. HIV disease cases, by current status\* and year of diagnosis\*\*, Kansas City HIV Region, 1999—2008**



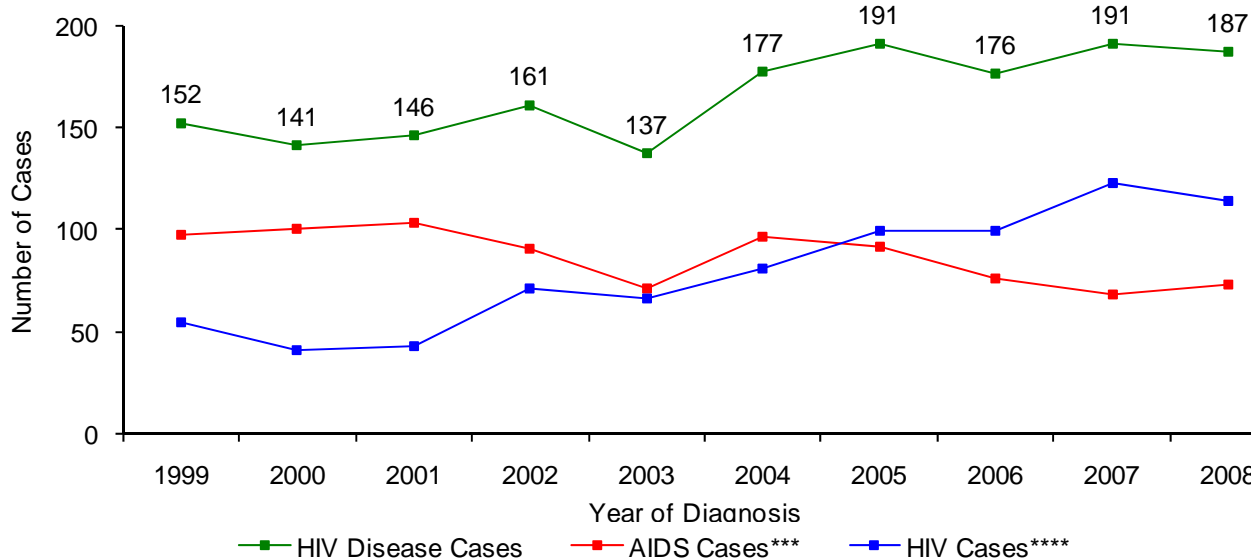
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

**Figure 4. Reported HIV disease cases, by current status\* and year of diagnosis\*\*, Kansas City HIV Region, 1999—2008**



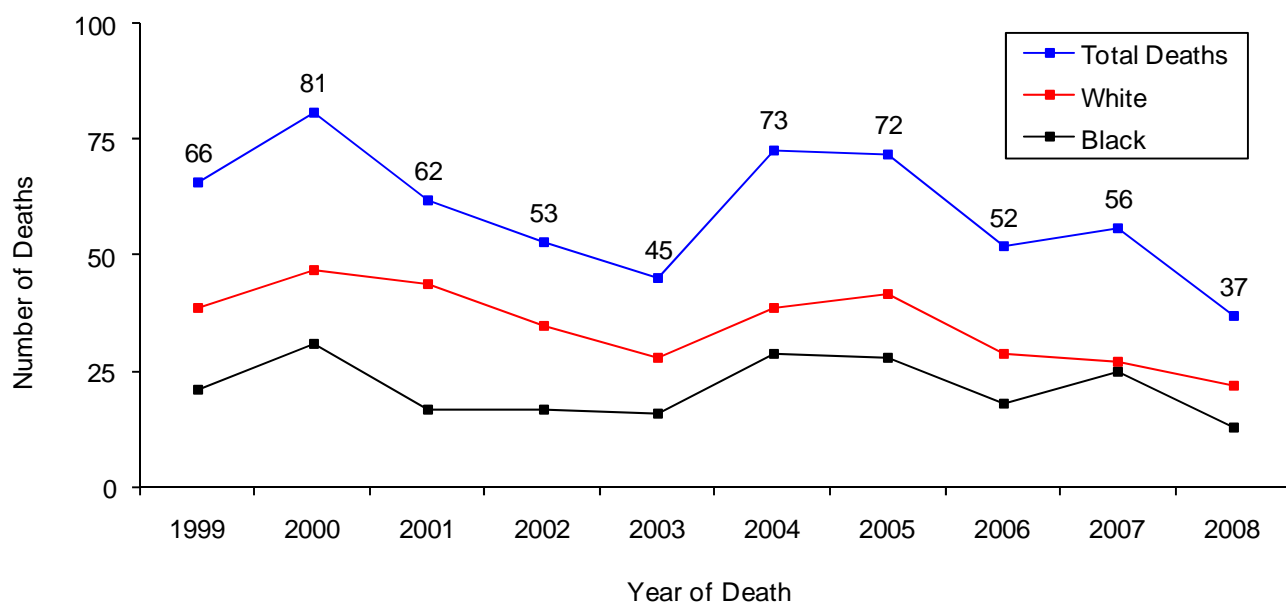
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

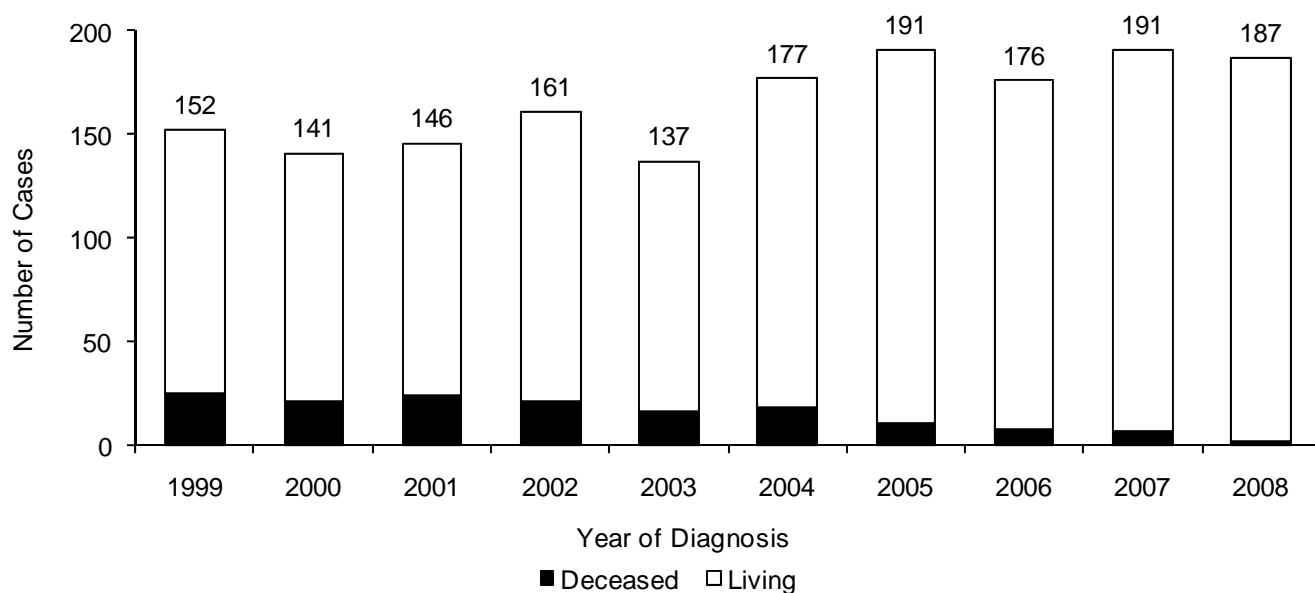
\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

The median number of new diagnoses was greater for 2004-2008 compared to 1999-2003 in the Kansas City HIV region. It is difficult to determine if the increase was due to increased testing, a true increase in the number of infections, or other factors. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

**Figure 5. HIV disease deaths\*, by selected race, by year of death, Kansas City HIV Region, 1999—2008**

\*Includes deaths that have occurred among those diagnosed with HIV disease in the Kansas City HIV Region.

†Only includes deaths through December 31, 2008, and reported by February 25, 2009.

**Figure 6. Persons diagnosed with HIV disease by current vital status\* and year of diagnosis\*\*, Kansas City HIV Region, 1999—2008**

\*Vital status on December 31, 2008.

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

The number of deaths among persons with HIV disease decreased from 2000-2003, increased from 2003 to 2004, and then generally decreased through 2008 (Figure 5). This was similar to trends observed in Missouri overall. The lower number of deaths in 2008 was likely related in part to delays in death reporting.

Of the 152 persons diagnosed with HIV disease in 1999, 25 (16%) were deceased by the end of 2008 (Figure 6). Among the 187 persons first diagnosed in 2008, 2 (1%) were deceased at the end of 2008. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease.

**Table 1. Living<sup>†</sup> HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Kansas City HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>
<b>Sex</b>									
Male	1,123	84.1%	187.5	1,614	86.6%	269.5	2,737	85.6%	457.1
Female	213	15.9%	33.9	249	13.4%	39.6	462	14.4%	73.6
Total	1,336	100.0%	108.9	1,863	100.0%	151.9	3,199	100.0%	260.8
<b>Race/Ethnicity</b>									
White	713	53.4%	74.9	1,049	56.3%	110.2	1,762	55.1%	185.1
Black	532	39.8%	300.5	676	36.3%	381.9	1,208	37.8%	682.4
Hispanic	73	5.5%	103.7	115	6.2%	163.4	188	5.9%	267.1
Asian	13	1.0%	62.2	6	0.3%	28.7	19	0.6%	90.9
American Indian	1	0.1%	15.2	11	0.6%	167.3	12	0.4%	182.5
Other/Unknown	4	0.3%	N/A	6	0.3%	N/A	10	0.3%	N/A
Total	1,336	100.0%	108.9	1,863	100.0%	151.9	3,199	100.0%	260.8
<b>Race/Ethnicity-Males</b>									
White Male	644	57.3%	138.2	966	59.9%	207.3	1,610	58.8%	345.4
Black Male	400	35.6%	485.6	524	32.5%	636.2	924	33.8%	1121.8
Hispanic Male	65	5.8%	175.9	104	6.4%	281.4	169	6.2%	457.3
Asian Male	11	1.0%	109.0	5	0.3%	49.5	16	0.6%	158.5
American Indian Male	1	0.1%	30.4	10	0.6%	303.9	11	0.4%	334.2
Other/Unknown Male	2	0.2%	N/A	5	0.3%	N/A	7	0.3%	N/A
Total	1,123	100.0%	187.5	1,614	100.0%	269.5	2,737	100.0%	457.1
<b>Race/Ethnicity-Females</b>									
White Female	69	32.4%	14.2	83	33.3%	17.1	152	32.9%	31.3
Black Female	132	62.0%	139.4	152	61.0%	160.6	284	61.5%	300.0
Hispanic Female	8	3.8%	23.9	11	4.4%	32.9	19	4.1%	56.8
Asian Female	2	0.9%	18.5	1	0.4%	9.2	3	0.6%	27.7
American Indian Female	0	0.0%	0.0	1	0.4%	30.5	1	0.2%	30.5
Other/Unknown Female	2	0.9%	N/A	1	0.4%	N/A	3	0.6%	N/A
Total	213	100.0%	33.9	249	100.0%	39.6	462	100.0%	73.6
<b>Current Age<sup>‡</sup></b>									
<2	4	0.3%	10.9	0	0.0%	0.0	4	0.1%	10.9
2-12	5	0.4%	2.7	0	0.0%	0.0	5	0.2%	2.7
13-18	13	1.0%	12.6	4	0.2%	3.9	17	0.5%	16.5
19-24	81	6.1%	90.7	32	1.7%	35.8	113	3.5%	126.6
25-44	707	52.9%	205.3	786	42.2%	228.3	1,493	46.7%	433.6
45-64	502	37.6%	157.3	993	53.3%	311.1	1,495	46.7%	468.4
65+	24	1.8%	16.2	48	2.6%	32.4	72	2.3%	48.5
Total	1,336	100.0%	108.9	1,863	100.0%	151.9	3,199	100.0%	260.8

<sup>†</sup>Includes persons diagnosed with HIV disease in the Kansas City HIV Region who are currently living, regardless of current residence.

\*Cases which remained HIV cases at the end of 2008.

\*\*Cases classified as AIDS by December 31, 2008.

\*\*\*The sum of HIV cases and AIDS cases.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

<sup>‡</sup>Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

**Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Kansas City HIV Region, 2008**

	HIV*			AIDS**			HIV Disease***		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
<b>Sex</b>									
Male	97	85.1%	16.2	57	78.1%	9.5	154	82.4%	25.7
Female	17	14.9%	2.7	16	21.9%	2.5	33	17.6%	5.3
Total	114	100.0%	9.3	73	100.0%	6.0	187	100.0%	15.2
<b>Race/Ethnicity</b>									
White	52	45.6%	5.5	30	41.1%	3.2	82	43.9%	8.6
Black	54	47.4%	30.5	36	49.3%	20.3	90	48.1%	50.8
Hispanic	6	5.3%	8.5	7	9.6%	9.9	13	7.0%	18.5
Asian	2	1.8%	9.6	0	0.0%	0.0	2	1.1%	9.6
American Indian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	114	100.0%	9.3	73	100.0%	6.0	187	100.0%	15.2
<b>Race/Ethnicity-Males</b>									
White Male	46	47.4%	9.9	25	43.9%	5.4	71	46.1%	15.2
Black Male	43	44.3%	52.2	26	45.6%	31.6	69	44.8%	83.8
Hispanic Male	6	6.2%	16.2	6	10.5%	16.2	12	7.8%	32.5
Asian Male	2	2.1%	19.8	0	0.0%	0.0	2	1.3%	19.8
American Indian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Male	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	97	100.0%	16.2	57	100.0%	9.5	154	100.0%	25.7
<b>Race/Ethnicity-Females</b>									
White Female	6	35.3%	1.2	5	31.3%	1.0	11	33.3%	2.3
Black Female	11	64.7%	11.6	10	62.5%	10.6	21	63.6%	22.2
Hispanic Female	0	0.0%	0.0	1	6.3%	3.0	1	3.0%	3.0
Asian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	17	100.0%	2.7	16	100.0%	2.5	33	100.0%	5.3
<b>Current Age<sup>†</sup></b>									
<2	3	2.6%	8.2	0	0.0%	0.0	3	1.6%	8.2
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	5	4.4%	4.9	0	0.0%	0.0	5	2.7%	4.9
19-24	28	24.6%	31.4	9	12.3%	10.1	37	19.8%	41.4
25-44	59	51.8%	17.1	41	56.2%	11.9	100	53.5%	29.0
45-64	18	15.8%	5.6	20	27.4%	6.3	38	20.3%	11.9
65+	1	0.9%	0.7	3	4.1%	2.0	4	2.1%	2.7
Total	114	100.0%	9.3	73	100.0%	6.0	187	100.0%	15.2

\*HIV cases diagnosed during 2008 which remained HIV cases at the end of the year.

\*\*AIDS cases initially diagnosed in 2008.

\*\*\*The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2008 with HIV, which progressed to AIDS in 2008.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

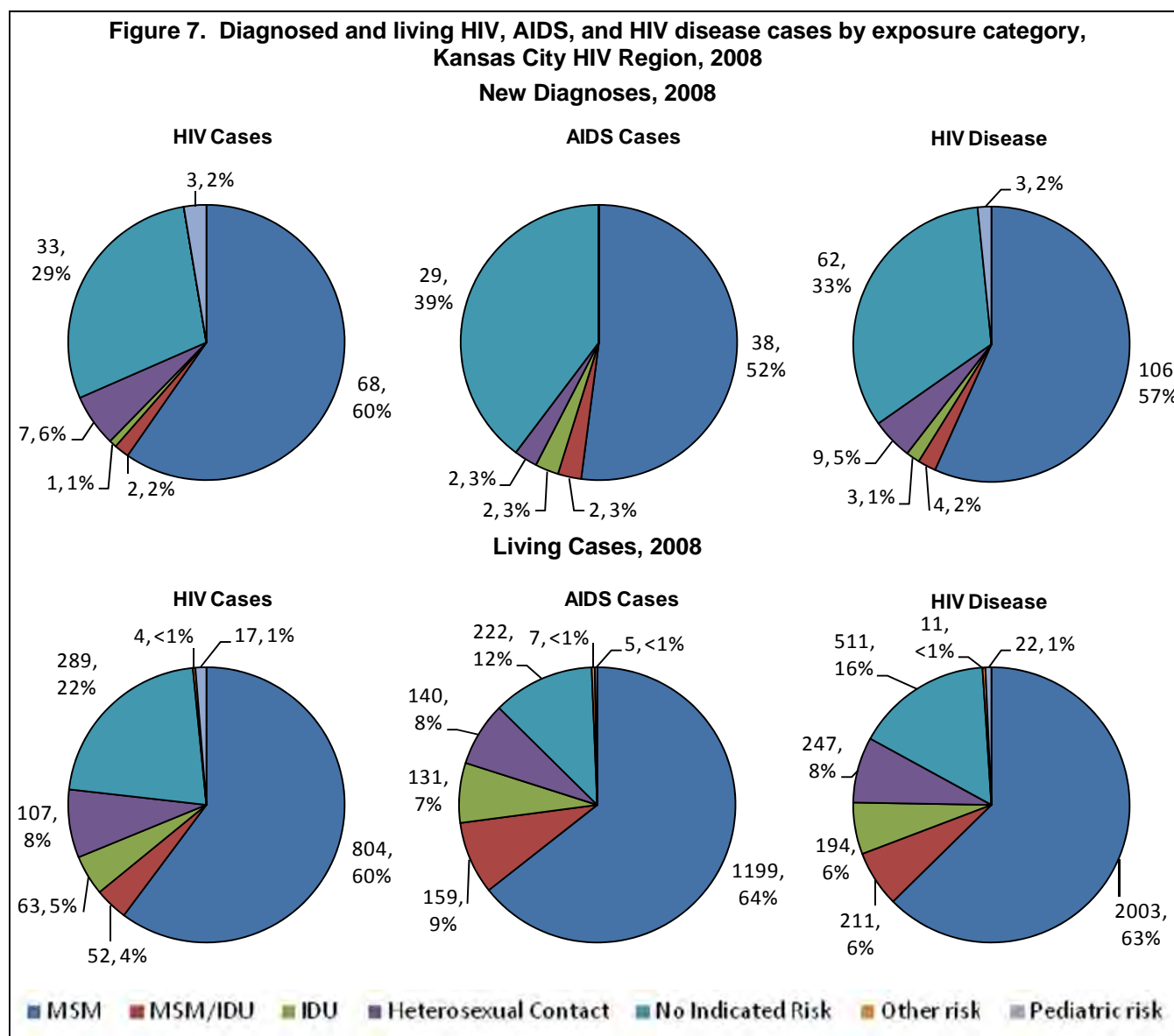
†Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

## Epi Profiles Summary: Kansas City HIV Region

Of the 3,199 persons living with HIV at the end of 2008, 86% were males (Table 1). The rate of those living with HIV disease was 6.2 times greater among males than females. Although whites represented the largest proportion of living HIV disease cases (55%), the rate of those living with HIV disease was 3.7 times greater among blacks than whites. The rate was 1.4 times greater among Hispanics than whites. Among males, the rate of persons living with HIV disease was 3.2 times greater for blacks than whites, and 1.3 times greater for Hispanics than whites. Among females, the rate of those living with HIV disease was 9.6 times greater among blacks than whites, and 1.8 times greater among Hispanics than whites.

Of the 187 persons newly diagnosed with HIV disease in 2008, 39% were classified as AIDS cases by the end of 2008 (Table 2). The rate of new HIV disease diagnoses was 4.8 times greater in males than females. Females represented a greater proportion of the newly diagnosed AIDS cases (22%) compared to the newly diagnosed HIV cases (15%). A greater proportion of the new AIDS cases occurred among blacks and Hispanics compared to new HIV cases. The rate of new HIV disease cases was 5.9 times greater in blacks than whites, and 2.2 times greater in Hispanics than whites.



Among all categories, the majority of cases were attributed to MSM (Figure 7). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

**Table 3. New and living HIV and AIDS cases and rates, by geographic area, Kansas City HIV Region, 2008**

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2008*			Living			Diagnosed 2008**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Kansas City	84	73.7%	18.7	1,068	79.9%	237.1	57	78.1%	12.7	1,520	81.6%	337.5
Jackson County†	21	18.4%	5.9	146	10.9%	41.4	11	15.1%	3.1	200	10.7%	56.7
Clay County†	3	2.6%	2.6	44	3.3%	38.2	1	1.4%	0.9	54	2.9%	46.9
Cass County†	2	1.8%	2.1	17	1.3%	17.5	3	4.1%	3.1	29	1.6%	29.9
Platte County†	2	1.8%	4.4	19	1.4%	41.9	0	0.0%	0.0	12	0.6%	26.4
Remainder of Region	2	1.8%	1.2	42	3.1%	25.3	1	1.4%	0.6	48	2.6%	28.9
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>114</b>	<b>100.0%</b>	<b>9.3</b>	<b>1,336</b>	<b>100.0%</b>	<b>108.9</b>	<b>73</b>	<b>100.0%</b>	<b>6.0</b>	<b>1,863</b>	<b>100.0%</b>	<b>151.9</b>

\*HIV cases diagnosed and reported to the Department during 2008 which remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

†Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

**Table 4. Diagnosed HIV cases and rates, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2008**

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
Kansas City	36	42.9%	14.2	42	50.0%	29.8	5	6.0%	11.8	84	100.0%	18.7
Jackson County†	12	57.1%	3.9	7	33.3%	30.7	1	4.8%	6.7	21	100.0%	5.9
Remainder of Region†	4	44.4%	1.0	5	55.6%	38.2	0	0.0%	0.0	9	100.0%	2.1
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>52</b>	<b>45.6%</b>	<b>5.5</b>	<b>54</b>	<b>47.4%</b>	<b>30.5</b>	<b>6</b>	<b>5.3%</b>	<b>8.5</b>	<b>114</b>	<b>100.0%</b>	<b>9.3</b>

\*Per 100,000 population based on 2007 MDHSS estimates.

\*\*Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Outside the limits of Kansas City.

Note: Row percentages are shown. Percentages may not total due to rounding.

**Table 5. Diagnosed AIDS cases and rates, by selected race/ethnicity, by geographic area, Kansas City, 2008**

Area	White, Non-Hispanic			Black, Non-Hispanic			Hispanic			Total**		
	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*	Cases	%	Rate*
Kansas City	21	36.8%	8.3	32	56.1%	22.7	4	7.0%	9.4	57	100.0%	12.7
Jackson County†	5	45.5%	1.6	3	27.3%	13.2	3	27.3%	20.2	11	100.0%	3.1
Remainder of Region†	4	80.0%	1.0	1	20.0%	7.6	0	0.0%	0.0	5	100.0%	1.2
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>30</b>	<b>41.1%</b>	<b>3.2</b>	<b>36</b>	<b>49.3%</b>	<b>20.3</b>	<b>7</b>	<b>9.6%</b>	<b>9.9</b>	<b>73</b>	<b>100.0%</b>	<b>6.0</b>

\*Per 100,000 population based on 2007 MDHSS estimates.

\*\*Includes cases in persons whose race/ethnicity is either unknown or not listed.

†Outside the limits of Kansas City.

Note: Row percentages are shown. Percentages may not total due to rounding.

The rates of new diagnoses and living cases were highest in Kansas City compared to other areas in the Kansas City HIV region (Table 3). Those diagnosed in Kansas City made up a greater proportion of both new AIDS cases and living AIDS cases compared to new HIV cases and living HIV cases.

There were differences in the proportion of new HIV cases diagnosed by race/ethnicity among the geographic areas (Table 4). A greater proportion of the new HIV cases diagnosed in Jackson County were white compared to Kansas City and the remainder of the HIV region.

There were also differences in the proportion of new AIDS cases diagnosed by race/ethnicity among the geographic areas (Table 5). The proportion of newly diagnosed AIDS cases that occurred among Hispanics was higher in Jackson County compared to the other geographic areas. However, the differences should be interpreted with some caution as the number of cases was small.

**Table 6. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Kansas City HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	35	51.5%	492	61.2%	16	42.1%	762	63.6%
Black	29	42.6%	259	32.2%	18	47.4%	356	29.7%
Hispanic	3	4.4%	43	5.3%	4	10.5%	66	5.5%
Other/Unknown	1	1.5%	10	1.2%	0	0.0%	15	1.3%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>68</b>	<b>100.0%</b>	<b>804</b>	<b>100.0%</b>	<b>38</b>	<b>100.0%</b>	<b>1,199</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 7. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Kansas City HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	3	0.5%	0	0.0%	4	0.2%
19-24	15	1.2%	51	8.3%	3	2.8%	69	3.4%
25-44	521	41.5%	304	49.4%	64	58.7%	903	45.1%
45-64	683	54.5%	251	40.8%	40	36.7%	984	49.1%
65+	35	2.8%	6	1.0%	2	1.8%	43	2.1%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>1,254</b>	<b>100.0%</b>	<b>615</b>	<b>100.0%</b>	<b>109</b>	<b>100.0%</b>	<b>2,003</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 8. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	971	58.0%	588	35.1%	93	5.6%	1,675	83.6%
Jackson County <sup>†</sup>	156	83.9%	18	9.7%	11	5.9%	186	9.3%
Clay County <sup>†</sup>	52	89.7%	3	5.2%	3	5.2%	58	2.9%
Cass County <sup>†</sup>	19	90.5%	1	4.8%	0	0.0%	21	1.0%
Remaining Counties <sup>†</sup>	56	88.9%	5	7.9%	2	3.2%	63	3.1%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>1,254</b>	<b>62.6%</b>	<b>615</b>	<b>30.7%</b>	<b>109</b>	<b>5.4%</b>	<b>2,003</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race/ethnicity in each area.

\*\*\*Percentage of cases per area.

<sup>†</sup>Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

There were a total of 106 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2008 for the Kansas City HIV region (Table 6). Whites represented a greater proportion of new HIV cases diagnosed in 2008 among MSM (51%) compared to blacks (43%), while blacks represented a greater proportion of new AIDS diagnoses (47%) compared to whites (42%). Of the newly diagnosed cases among MSM, 36% progressed to AIDS by the end of 2008. A lower proportion of newly diagnosed cases among white MSM progressed to AIDS by the end of the year compared to blacks and Hispanics.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 7). Among white MSM living with HIV disease, the majority (54%) were between 45-64 years of age at the end of 2008. In contrast, only 41% and 37% of living black and Hispanic MSM with HIV disease, respectively, were between 45-64 years of age.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM (Table 8). In Kansas City, black MSM comprised a larger proportion of living cases compared to other areas.

**Table 9. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Kansas City HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	2	100.0%	40	76.9%	2	100.0%	107	67.3%
Black	0	0.0%	9	17.3%	0	0.0%	42	26.4%
Hispanic	0	0.0%	3	5.8%	0	0.0%	8	5.0%
Other/Unknown	0	0.0%	0	0.0%	0	0.0%	2	1.3%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>2</b>	<b>100.0%</b>	<b>52</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>159</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 10. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Kansas City HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	56	38.1%	16	31.4%	5	45.5%	77	36.5%
45-64	90	61.2%	35	68.6%	6	54.5%	133	63.0%
65+	1	0.7%	0	0.0%	0	0.0%	1	0.5%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>147</b>	<b>100.0%</b>	<b>51</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>	<b>211</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 11. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	109	64.1%	48	28.2%	11	6.5%	170	80.6%
Jackson County†	22	88.0%	3	12.0%	0	0.0%	25	11.8%
Clay County†	6	100.0%	0	0.0%	0	0.0%	6	2.8%
Remaining Counties†	10	100.0%	0	0.0%	0	0.0%	10	4.7%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>147</b>	<b>69.7%</b>	<b>51</b>	<b>24.2%</b>	<b>11</b>	<b>5.2%</b>	<b>211</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race/ethnicity in each area.

\*\*\*Percentage of cases per area.

†Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

There were a total of four new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2008 for the Kansas City HIV region (Table 9). All new cases were diagnosed among whites in 2008. There were 211 persons living with HIV disease attributed to MSM/IDU at the end of 2008 in the Kansas City HIV region. Whites represented the largest proportion of both living HIV and AIDS cases. However, whites comprised a larger proportion of living HIV cases among MSM/IDU (77%) compared to living AIDS cases (67%).

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 10). A greater proportion of black MSM/IDU living with HIV disease (69%) were between 45-64 years of age at the end of 2008 compared to whites (61%) and Hispanics (55%) in the Kansas City HIV region.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM/IDU (Table 11). In Kansas City, black MSM/IDU comprised a larger proportion of living cases compared to other areas.

**Table 12. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Kansas City HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	21	33.3%	0	0.0%	29	22.1%
Black Male	0	0.0%	15	23.8%	0	0.0%	42	32.1%
Hispanic Male	0	0.0%	3	4.8%	0	0.0%	7	5.3%
White Female	1	100.0%	11	17.5%	1	50.0%	23	17.6%
Black Female	0	0.0%	10	15.9%	1	50.0%	27	20.6%
Hispanic Female	0	0.0%	2	3.2%	0	0.0%	3	2.3%
<b>KANSAS CITY HIV REGION TOTAL<sup>†</sup></b>	<b>1</b>	<b>100.0%</b>	<b>63</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>131</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 13. Living HIV disease cases in injecting drug users, by selected race/ethnicity and sex, by current age group, Kansas City HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	2.9%	0	0.0%	1	0.5%
25-44	21	42.0%	15	26.3%	18	52.9%	11	29.7%	72	37.1%
45-64	27	54.0%	41	71.9%	15	44.1%	24	64.9%	115	59.3%
65+	2	4.0%	1	1.8%	0	0.0%	2	5.4%	6	3.1%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>50</b>	<b>100.0%</b>	<b>57</b>	<b>100.0%</b>	<b>34</b>	<b>100.0%</b>	<b>37</b>	<b>100.0%</b>	<b>194</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 14. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	56	35.9%	87	55.8%	12	7.7%	156	80.4%
Jackson County <sup>†</sup>	16	72.7%	3	13.6%	3	13.6%	22	11.3%
Clay County <sup>†</sup>	5	100.0%	0	0.0%	0	0.0%	5	2.6%
Remaining Counties <sup>†</sup>	7	63.6%	4	36.4%	0	0.0%	11	5.7%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>84</b>	<b>43.3%</b>	<b>94</b>	<b>48.5%</b>	<b>15</b>	<b>7.7%</b>	<b>194</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race/ethnicity in each area.

\*\*\*Percentage of cases per area.

†Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

There were a total of three new HIV disease diagnoses attributed to injecting drug users (IDU) in 2008 for the Kansas City HIV region (Table 12). All new cases were diagnosed among females in 2008. There were 194 persons living with HIV disease attributed to IDU at the end of 2008 in the Kansas City HIV region. The largest proportion of living HIV cases was white males (33%), while black males represented the largest proportion of living AIDS cases (32%).

The distribution of living HIV disease cases by current age varied by race/ethnicity and sex among IDU (Table 13). Greater proportions of white male (42%) and white female (53%) IDU living with HIV disease were between 25-44 years of age at the end of 2008 compared to black male (26%) and black female (30%) IDU.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for IDU (Table 14). In Kansas City, black IDU comprised a larger proportion of living cases compared to other areas.

**Table 15. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Kansas City HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	4	3.7%	0	0.0%	6	4.3%
Black Male	1	14.3%	8	7.5%	0	0.0%	12	8.6%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	4	2.9%
White Female	3	42.9%	40	37.4%	2	100.0%	48	34.3%
Black Female	3	42.9%	51	47.7%	0	0.0%	64	45.7%
Hispanic Female	0	0.0%	2	1.9%	0	0.0%	4	2.9%
<b>KANSAS CITY HIV REGION TOTAL<sup>†</sup></b>	<b>7</b>	<b>100.0%</b>	<b>107</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>140</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

<sup>†</sup>Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 16. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Kansas City HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	2	2.3%	1	0.9%	3	1.2%
25-44	6	60.0%	11	55.0%	47	53.4%	78	67.8%	152	61.5%
45-64	4	40.0%	9	45.0%	33	37.5%	35	30.4%	85	34.4%
65+	0	0.0%	0	0.0%	6	6.8%	1	0.9%	7	2.8%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>10</b>	<b>100.0%</b>	<b>20</b>	<b>100.0%</b>	<b>88</b>	<b>100.0%</b>	<b>115</b>	<b>100.0%</b>	<b>247</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 17. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, Kansas City HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Kansas City	54	29.0%	121	65.1%	8	4.3%	186	75.3%
Jackson County <sup>†</sup>	18	60.0%	10	33.3%	1	3.3%	30	12.1%
Clay County <sup>†</sup>	8	88.9%	1	11.1%	0	0.0%	9	3.6%
Remaining Counties <sup>†</sup>	18	81.8%	3	13.6%	1	4.5%	22	8.9%
<b>KANSAS CITY HIV REGION TOTAL</b>	<b>98</b>	<b>39.7%</b>	<b>135</b>	<b>54.7%</b>	<b>10</b>	<b>4.0%</b>	<b>247</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race/ethnicity in each area.

\*\*\*Percentage of cases per area.

Note: Percentages may not total due to rounding.

<sup>†</sup>Outside the limits of Kansas City.

Note: Percentages may not total due to rounding.

There were a total of nine new HIV disease diagnoses attributed to heterosexual contact in 2008 for the Kansas City HIV region (Table 15). All but one of the new cases were diagnosed among females. There were 247 persons living with HIV disease attributed to heterosexual contact at the end of 2008 in the Kansas City HIV region. Black females represented the largest proportion of both living HIV (48%) and AIDS (46%) cases among heterosexual contact cases.

At the end of 2008, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age for all race/ethnicity and sex categories presented (Table 16). The greatest proportion of cases between 25-44 years old occurred among black females (68%).

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 17). In Kansas City, black heterosexual contact cases comprised a larger proportion of living cases compared to other areas.

**Table 18. Newly diagnosed and living HIV and AIDS cases with exposure category assignments for Kansas City HIV Region, 2008**

Exposure category	HIV cases				AIDS cases			
	2008*		Living		2008**		Living	
<b>Adult/Adolescent</b>								
Men who have sex with men	91	82.0%	980	74.3%	54	74.0%	1,319	71.0%
Men who have sex with men and inject drugs	2	1.8%	61	4.6%	3	4.1%	174	9.4%
Injecting drug use	2	1.8%	89	6.7%	6	8.2%	163	8.8%
Heterosexual contact	16	14.4%	185	14.0%	10	13.7%	195	10.5%
Hemophilia/coagulation disorder	0	0.0%	3	0.2%	0	0.0%	5	0.3%
Blood transfusion or tissue recipient	0	0.0%	1	0.1%	0	0.0%	2	0.1%
No indicated risk (NIR)	-----	-----	-----	-----	-----	-----	-----	-----
<b>ADULT/ADOLESCENT SUBTOTAL</b>	<b>111</b>	<b>100.0%</b>	<b>1,319</b>	<b>100.0%</b>	<b>73</b>	<b>100.0%</b>	<b>1,858</b>	<b>100.0%</b>
<b>Pediatric (&lt;13 years old)</b>								
<b>PEDIATRIC SUBTOTAL</b>	<b>3</b>	<b>100.0%</b>	<b>17</b>	<b>100.0%</b>	<b>0</b>	<b>0.0%</b>	<b>5</b>	<b>100.0%</b>
<b>TOTAL</b>	<b>114</b>		<b>1,336</b>		<b>73</b>		<b>1,863</b>	

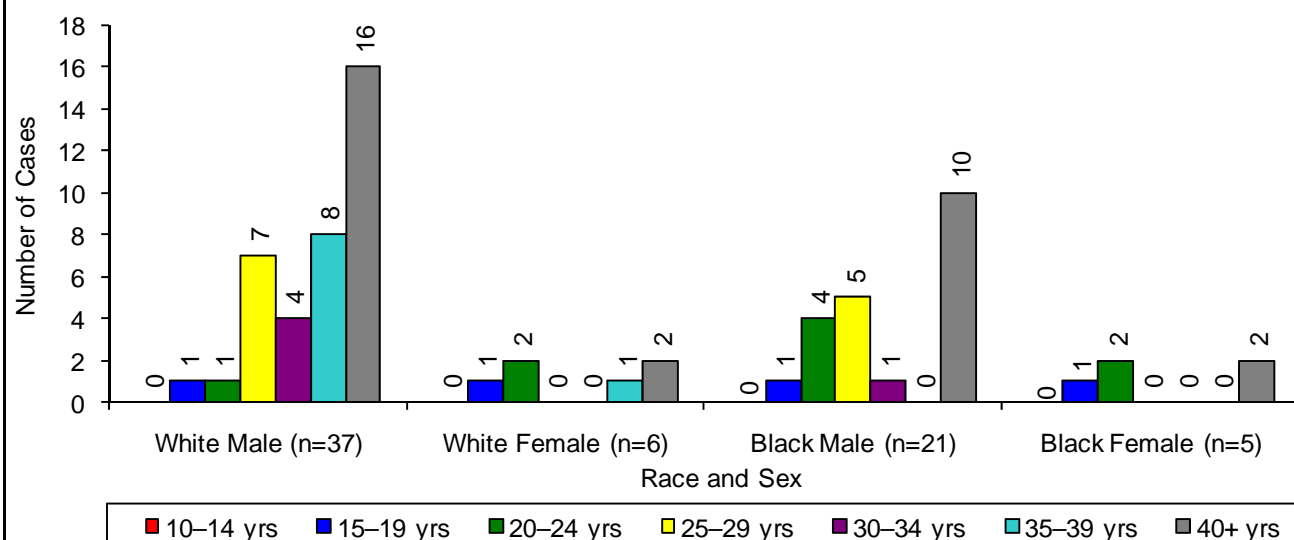
\*HIV cases reported during 2008 which remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

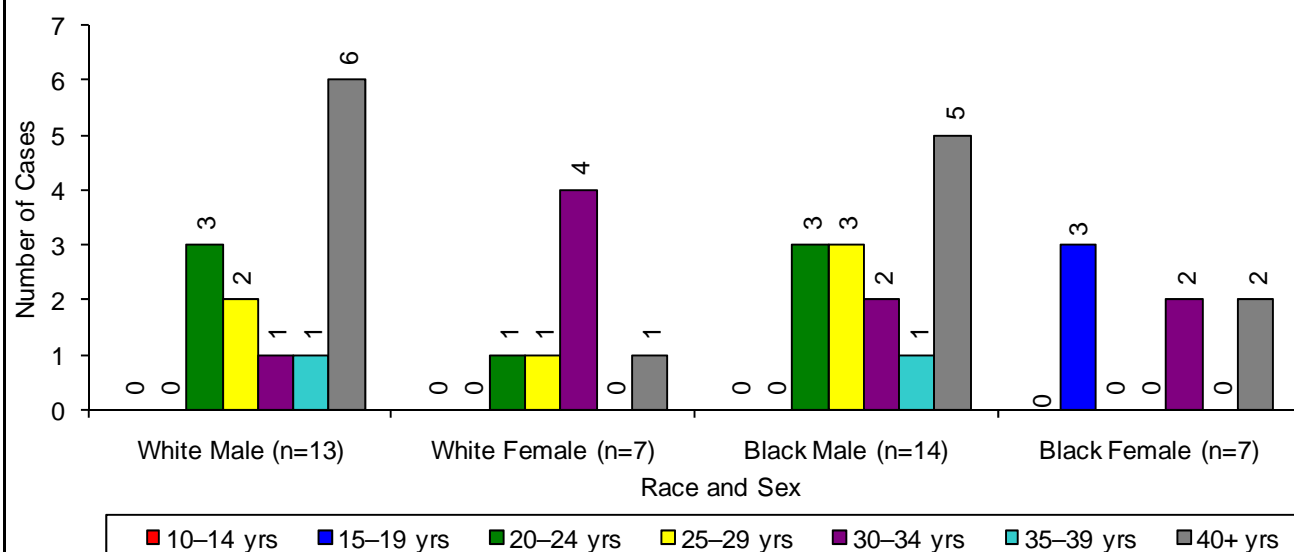
Note: Percentages may not total due to rounding.

The data in Table 18 have been adjusted to proportionately re-distribute individuals with no indicated risk factor based on sex and race/ethnicity to known exposure categories. These data do not reflect the true counts of persons reported in each exposure category. Among both new and living HIV and AIDS cases, MSM represented the greatest proportion of cases. MSM represented a greater proportion of new and living HIV and AIDS cases in the Kansas City HIV region compared to Missouri overall. The proportion of MSM cases was greater for new HIV and AIDS cases compared to the proportion among their respective living cases. This may indicate changes in how individual are being infected over time. However, the observed pattern may also be related to the method used to re-distribute those with unknown risks. The method used to re-distribute new cases may weight those with no indicated risk more heavily to the MSM category. All three new HIV cases diagnosed among children less than 13 years of age in 2008 occurred in the Kansas City HIV region.

**Figure 8. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Kansas City Region, 2008**

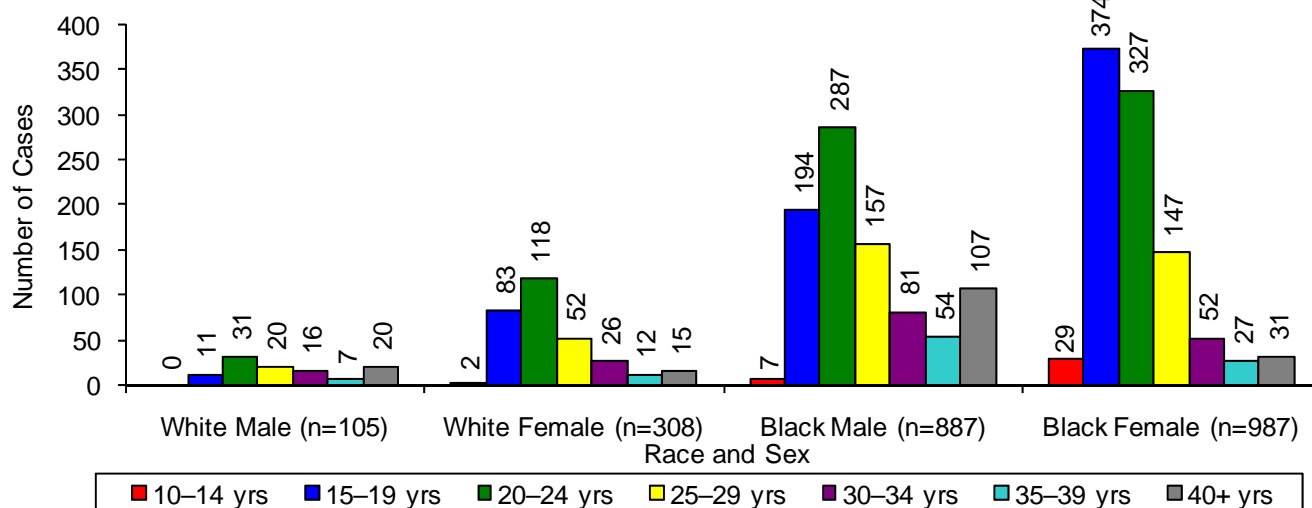


**Figure 9. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Kansas City Region, 2008**

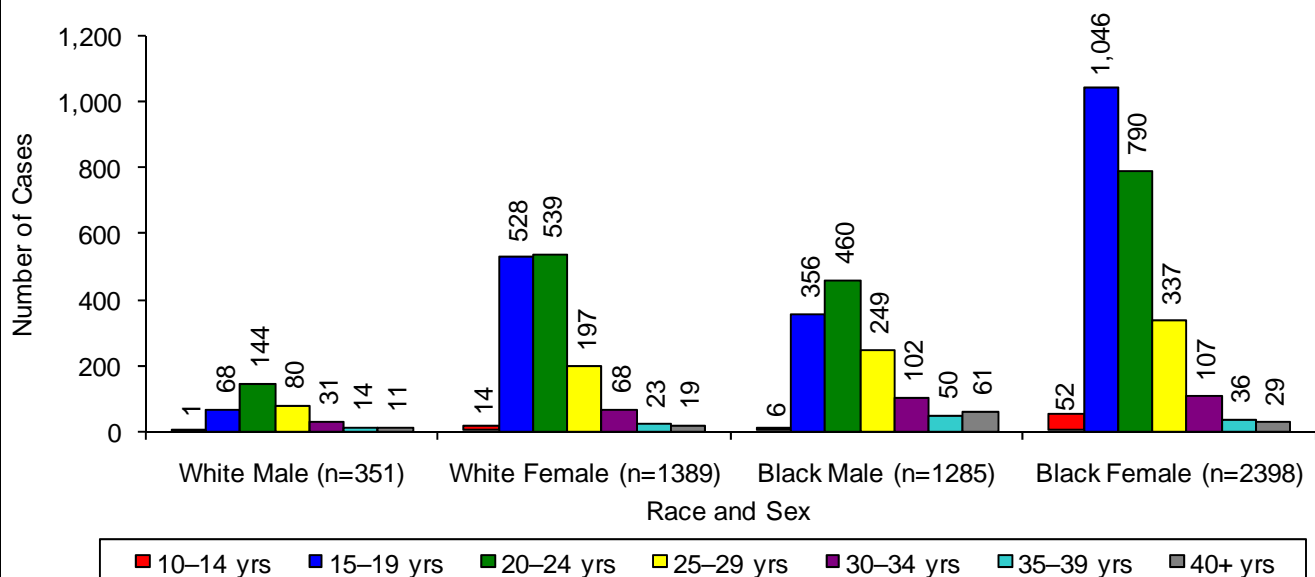


The largest number of P&S syphilis cases was reported among white males (37), followed by black males (21) in the Kansas City HIV region (Figure 8). The number of reported cases decreased from 2007 to 2008 among all race/ethnicity and sex categories presented. There were differences in the distribution of reported cases by age at diagnosis among the race/ethnicity and sex categories. A greater proportion of diagnoses was between 35-39 years old (22%) among white males compared to the other race/ethnicity and sex categories presented.

The largest number of early latent syphilis cases was reported among black males (14), followed by white males (13) (Figure 9). The number of reported early latent syphilis cases decreased from 2007 to 2008 among white males (18 to 13), and increased among white females (6 to 7), black males (11 to 14) and black females (6 to 7). Among males, individuals 40 or more years of age represented the greater number of diagnoses. Among white females, the largest number of cases was reported among individuals 30-34 years of age. Individuals 15-19 years of age comprised the largest number of early latent syphilis diagnoses among black females.

**Figure 10. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Kansas City Region, 2008**

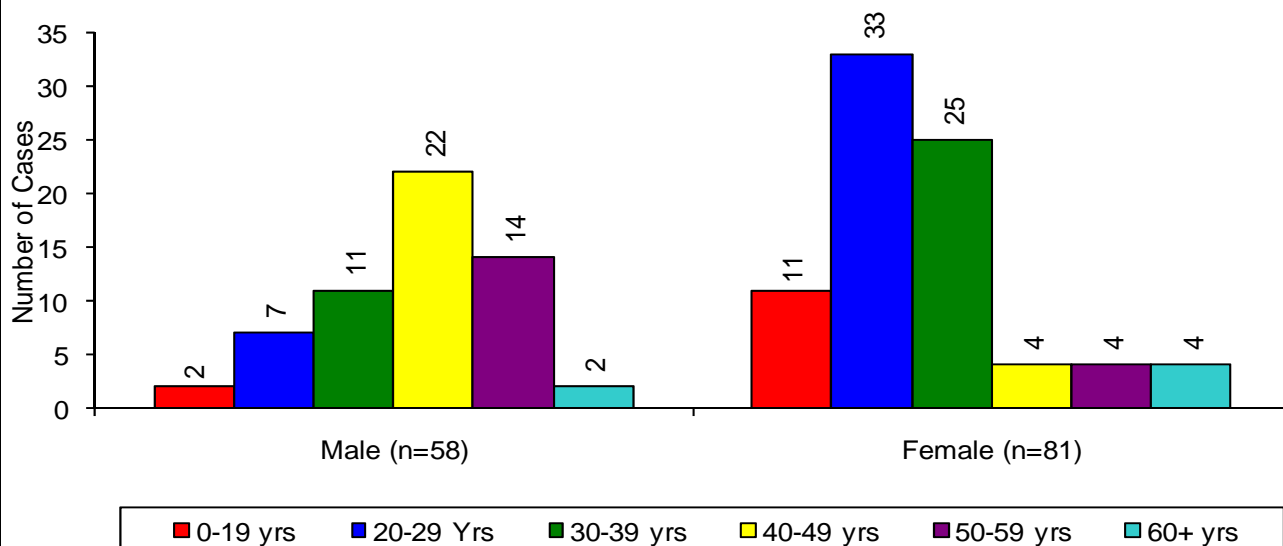
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

**Figure 11. Reported chlamydia cases, by race and sex, by age group at diagnosis, Kansas City Region, 2008**

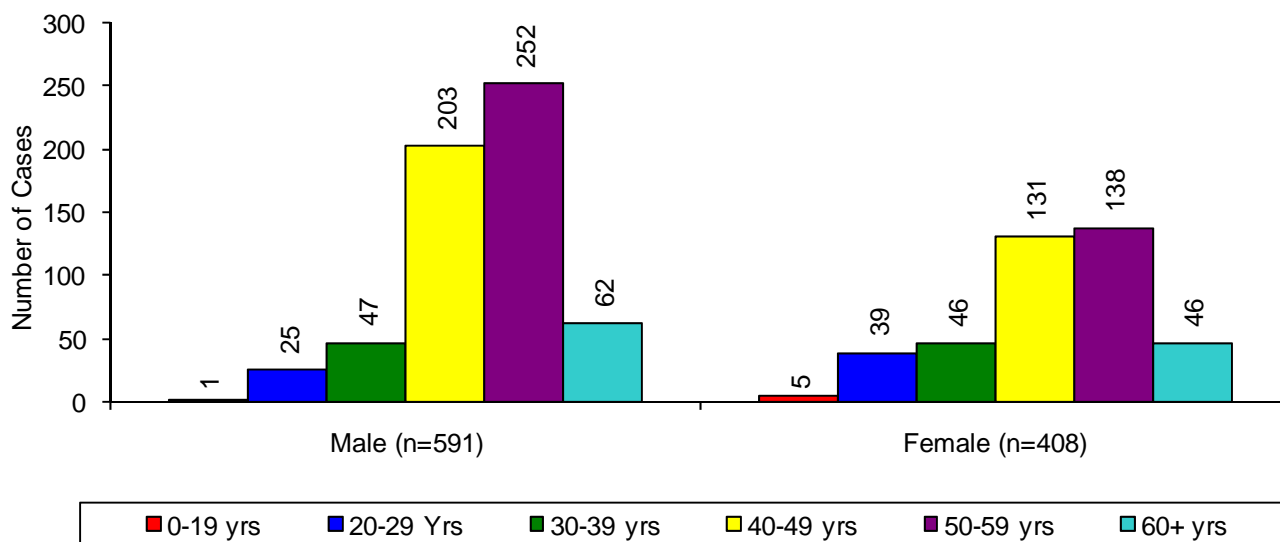
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among black females (987), followed by black males (887) (Figure 10). The number of reported cases decreased from 2007 to 2008 among all race/ethnicity and sex categories presented. There were differences in the distribution of reported cases by age at diagnosis among the race/ethnicity and sex categories. Among black females, the largest number of gonorrhea cases was reported among those 15-19 years of age. In all other race/ethnicity and sex categories, individuals 20-24 years of age represented the largest number of reported cases.

The largest number of chlamydia cases was reported among black females (2,398), followed by white females (1,389). The number of reported chlamydia cases increased from 2007 to 2008 among all race/ethnicity and sex categories presented. Among males, the largest number of cases was reported among individuals 20-24 years of age. Among black females, individuals 15-19 years of age represented the largest number of reported cases. There was nearly an equal number of reported cases among 15-19 and 20-24 year olds for white females.

**Figure 12. Reported Hepatitis B cases, by sex and by age group at diagnosis, Kansas City Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

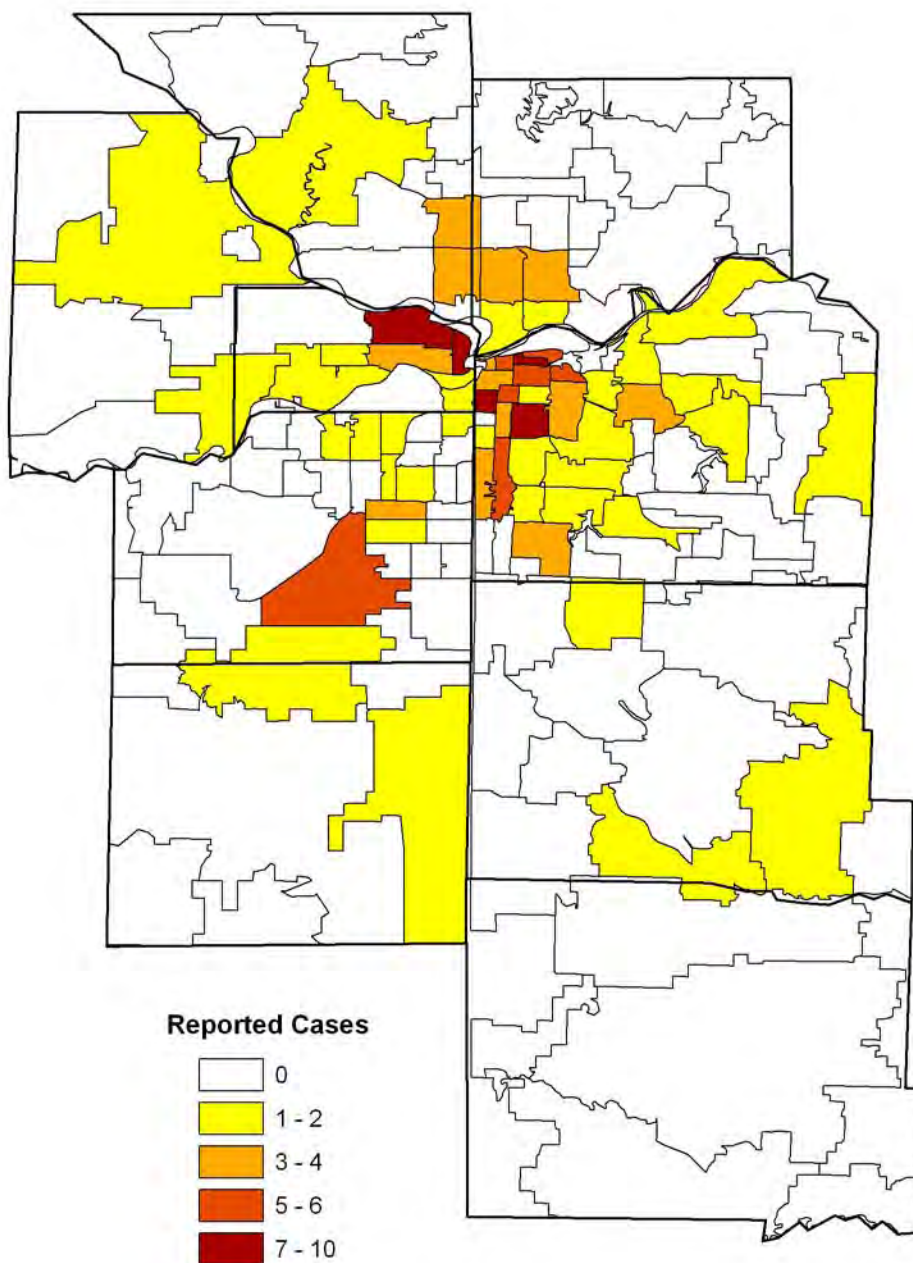
**Figure 13. Reported Hepatitis C cases, by sex and by age group at diagnosis, Kansas City Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

There were 139 reported cases of Hepatitis B in the Kansas City HIV region during 2008 (Figure 12). Females represented 58% of reported Hepatitis B cases. There were differences in the age distribution of reported Hepatitis B cases by sex. Among males, the largest proportion of cases was between 40-49 years of age at diagnosis. The largest proportion of cases was 20-29 years old among females.

In 2008, there were 999 Hepatitis C cases reported in the Kansas City HIV region (Figure 13). Of the reported Hepatitis C cases, 59% were male. There were slight differences in the age at diagnosis of reported Hepatitis C cases by sex. A greater proportion of females were diagnosed at less than 50 years of age (54%) compared to males (47%).

**Figure 14. Reported early syphilis cases<sup>†</sup>, by zip code tabulation area at diagnosis, Kansas City Area\*, 2008**

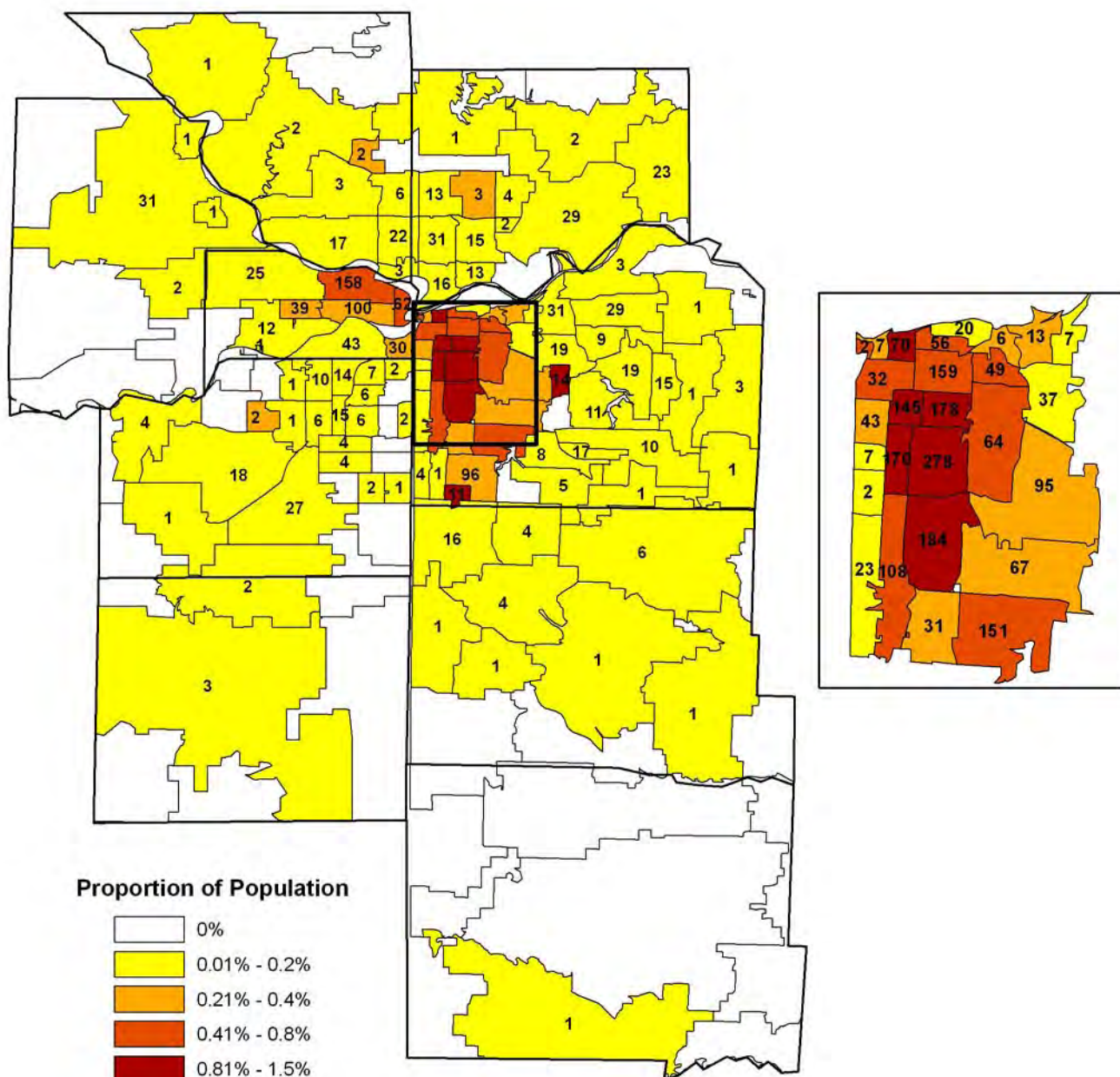


<sup>†</sup>Includes primary, secondary, and early latent syphilis cases.

\*Includes Platte, Clay, Jackson, Cass, and Bates counties in Missouri and Leavenworth, Wyandotte, Johnson, and Miami counties in Kansas.

The majority of early syphilis cases in the Kansas City Area were reported from zip code tabulation areas (ZCTA) in Missouri (82%). The largest numbers of early syphilis cases were reported among ZCTA in Jackson County, Missouri. In Missouri, the largest numbers of cases in the Kansas City Area were diagnosed in the following ZCTA: 64111 (10 cases), 64124 (9 cases), and 64130 (9 cases). In Kansas, the largest numbers were diagnosed in the following ZCTA: 66101 (8 cases), 66104 (8 cases), and 66062 (5 cases).

**Figure 15. Proportion of reported gonorrhea cases in the population<sup>†</sup> and number of reported cases, by zip code tabulation area at diagnosis, Kansas City Area\*, 2008**

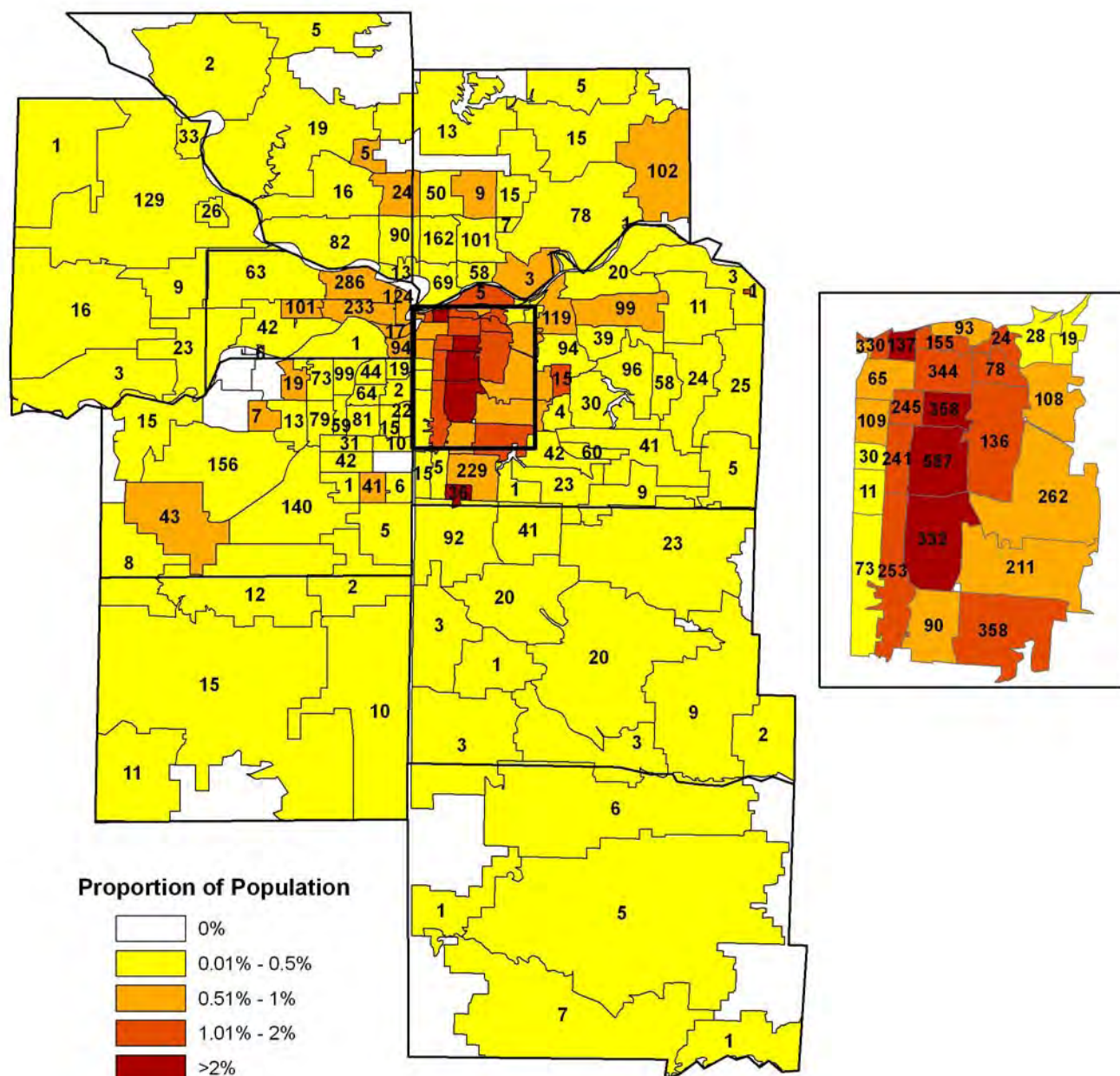


<sup>†</sup>Based on 2000 census population estimates by zip code tabulation area.

\*Includes Platte, Clay, Jackson, Cass, and Bates counties in Missouri and Leavenworth, Wyandotte, Johnson, and Miami counties in Kansas.

The majority of gonorrhea cases in the Kansas City Area were reported from zip code tabulation areas (ZCTA) in Missouri (80%). The largest numbers of gonorrhea cases were reported among ZCTA in Jackson County, Missouri. The proportions of the population in each ZCTA reported with gonorrhea were also highest in Jackson County, Missouri.

**Figure 15. Proportion of reported chlamydia cases in the population<sup>†</sup> and number of reported cases, by zip code tabulation area at diagnosis, Kansas City Area\*, 2008**



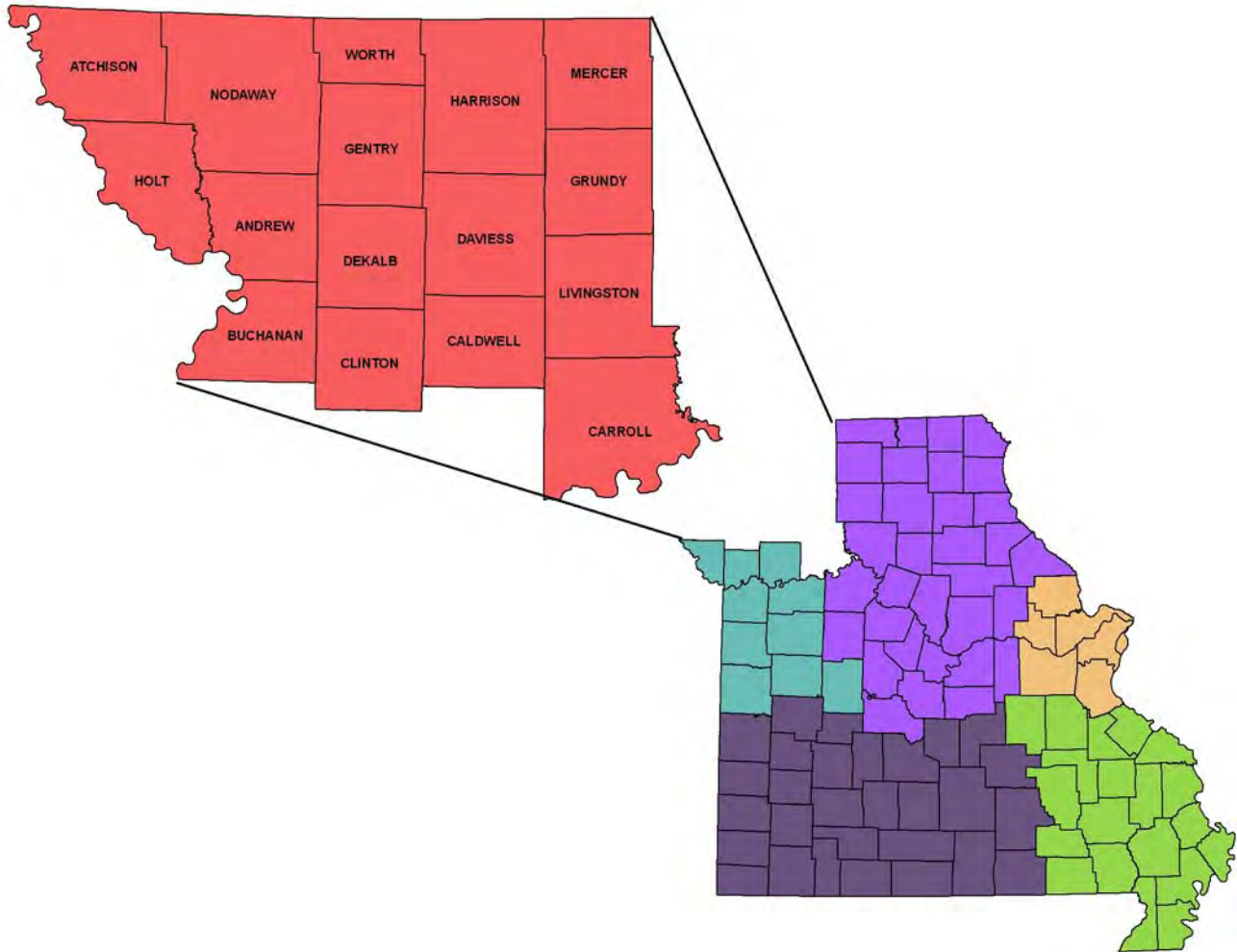
<sup>†</sup>Based on 2000 census population estimates by zip code tabulation area.

\*Includes Platte, Clay, Jackson, Cass, and Bates counties in Missouri and Leavenworth, Wyandotte, Johnson, and Miami counties in Kansas.

The majority of chlamydia cases in the Kansas City Area were reported from zip code tabulation areas (ZCTA) in Missouri (74%). The largest numbers of chlamydia cases were reported among ZCTA in Jackson County, Missouri. The proportions of the population in each ZCTA reported with chlamydia were also highest in Jackson County, Missouri.

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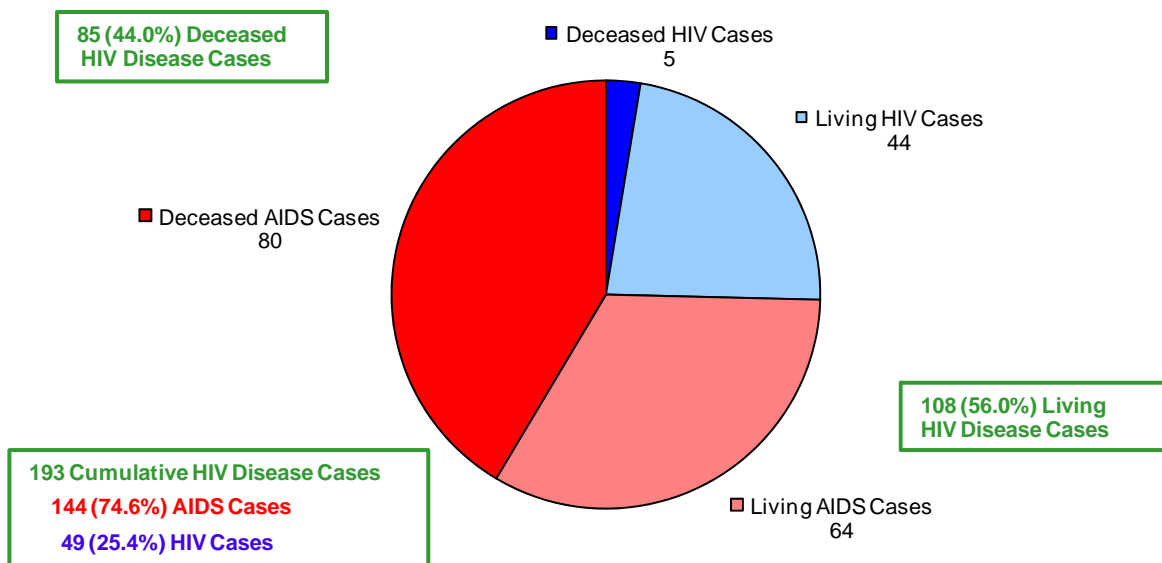
# NORTHWEST REGION



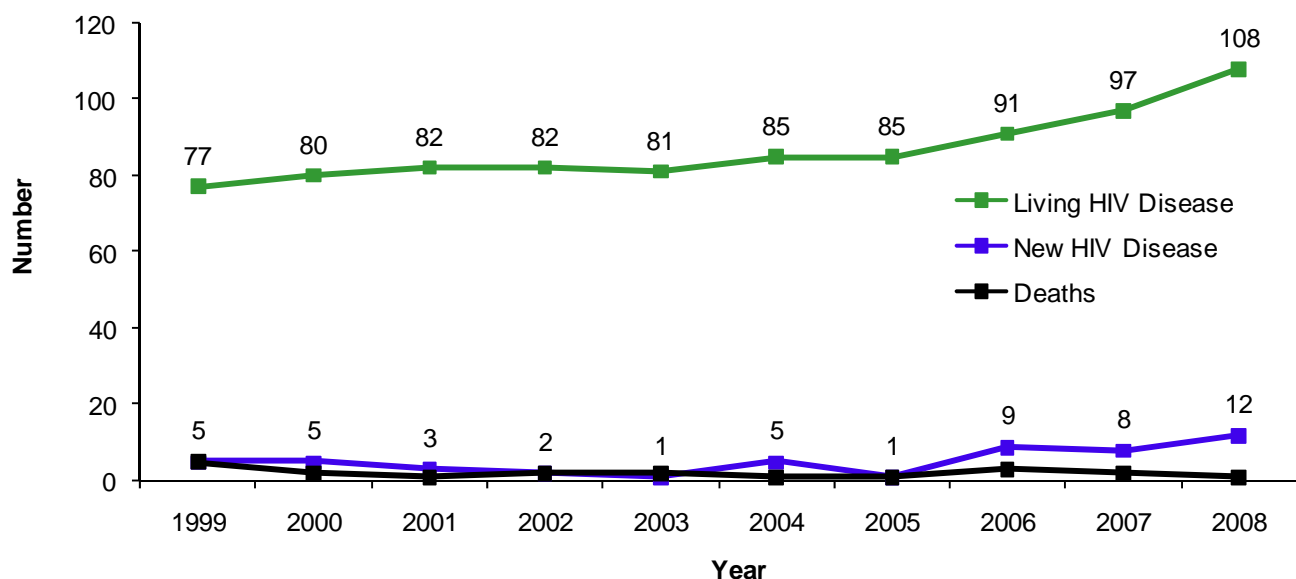
**Population Estimates, Northwest HIV Region, 2007**

County	White		Black		Hispanic		American Indian		Asian		Total
Andrew County	16,280	96.5%	232	1.4%	229	1.4%	54	0.3%	69	0.4%	16,864
Atchison County	5,850	95.8%	147	2.4%	73	1.2%	19	0.3%	19	0.3%	6,108
Buchanan County	78,087	90.3%	4,445	5.1%	2,980	3.4%	391	0.5%	582	0.7%	86,485
Caldwell County	9,022	97.2%	99	1.1%	115	1.2%	32	0.3%	16	0.2%	9,284
Carroll County	9,469	96.0%	237	2.4%	103	1.0%	33	0.3%	17	0.2%	9,859
Clinton County	20,057	96.0%	383	1.8%	284	1.4%	86	0.4%	84	0.4%	20,894
Daviess County	7,772	97.6%	32	0.4%	102	1.3%	30	0.4%	27	0.3%	7,963
DeKalb County	10,598	86.6%	1,281	10.5%	187	1.5%	95	0.8%	73	0.6%	12,234
Gentry County	6,122	98.0%	24	0.4%	51	0.8%	23	0.4%	29	0.5%	6,249
Grundy County	9,670	95.8%	60	0.6%	296	2.9%	47	0.5%	22	0.2%	10,095
Harrison County	8,649	97.6%	35	0.4%	120	1.4%	21	0.2%	36	0.4%	8,861
Holt County	4,894	98.6%	7	0.1%	25	0.5%	32	0.6%	5	0.1%	4,963
Livingston County	13,446	94.7%	442	3.1%	188	1.3%	44	0.3%	76	0.5%	14,196
Mercer County	3,464	98.8%	7	0.2%	14	0.4%	21	0.6%	1	0.0%	3,507
Nodaway County	21,021	95.0%	447	2.0%	206	0.9%	52	0.2%	394	1.8%	22,120
Worth County	2,076	99.0%	4	0.2%	7	0.3%	9	0.4%	2	0.1%	2,098
Region Total	226,477	93.7%	7,882	3.3%	4,980	2.1%	989	0.4%	1,452	0.6%	241,780

**Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Northwest HIV Region, 1982—2008**



**Figure 2. Living and new HIV disease cases and deaths by year\*, Northwest HIV Region, 1999—2008**

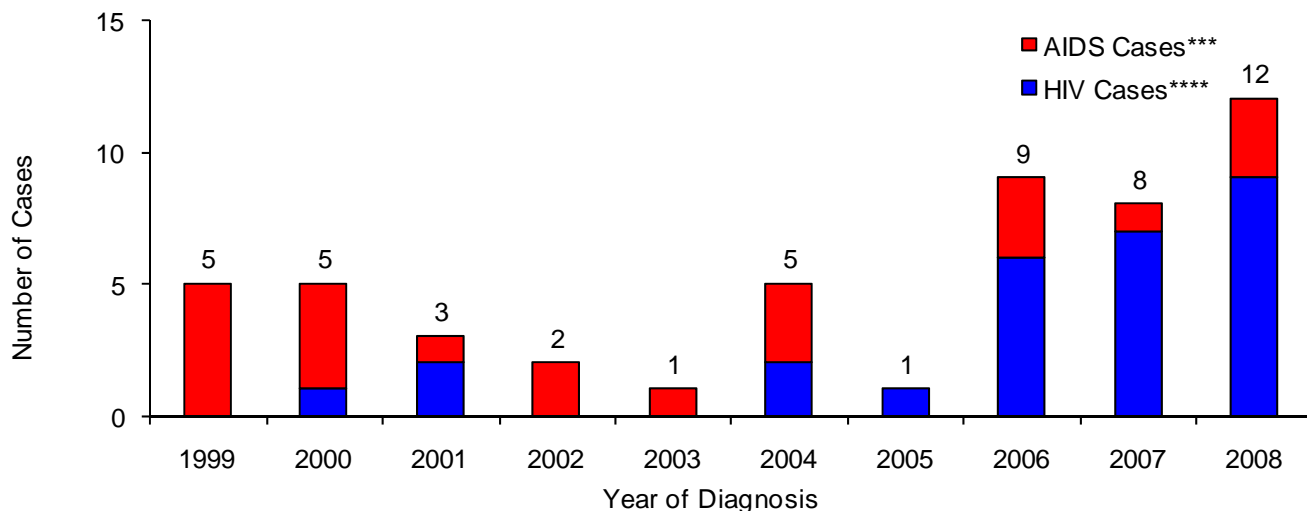


\*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2008, there have been 193 HIV disease cases diagnosed in the Northwest HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 56% were still presumed to be living with HIV disease at the end of 2008. Among those living with HIV disease, 44 were classified as HIV cases at the end of 2008 and 64 were classified as AIDS cases.

At the end of 2008, there were 108 persons living with HIV disease whose most recent diagnosis occurred in the Northwest HIV region (Figure 2). The number of people living with HIV disease increased over time. There were 12 new HIV disease diagnoses in 2008. The number of new diagnoses increased from 2005 to 2008, while the number of deaths among persons with HIV disease remained generally stable.

**Figure 3. HIV disease cases, by current status\* and year of diagnosis\*\*, Northwest HIV Region, 1999—2008**



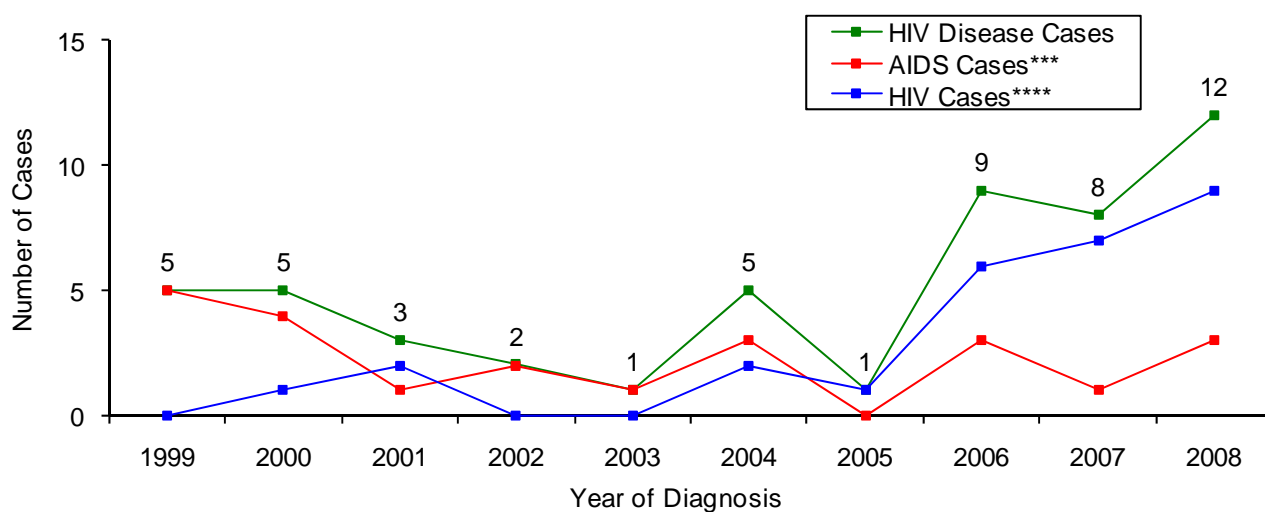
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

**Figure 4. Reported HIV disease cases, by current status\* and year of diagnosis\*\*, Northwest HIV Region, 1999—2008**



\*HIV case vs. AIDS case

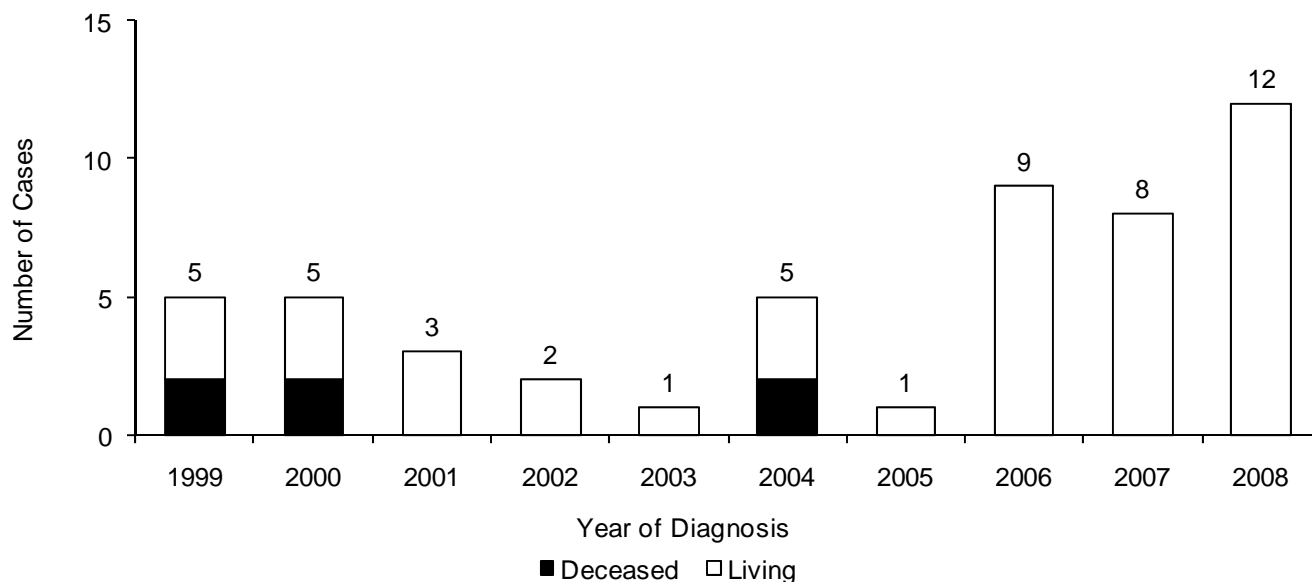
\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

The number of new HIV disease diagnoses increased from 2005 to 2008. It is difficult to determine if the increase was due to increased testing, a true increase in the number of infections, or other factors. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

**Figure 5. Persons diagnosed with HIV disease by current vital status\* and year of diagnosis\*\*, Northwest HIV Region, 1999—2008**



\*Vital status on December 31, 2008.

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

Of the five persons diagnosed with HIV disease in 1999, two (40%) were deceased by the end of 2008 (Figure 5). Among the 12 individuals first diagnosed in 2008, none were deceased at the end of 2008. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease. Among persons diagnosed from 2001-2003 and 2005-2008 no deaths were reported to MDHSS.

**Table 1. Living<sup>†</sup> HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Northwest HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
<b>Sex</b>									
Male	38	86.4%	31.5	53	82.8%	43.9	91	84.3%	75.4
Female	6	13.6%	5.0	11	17.2%	9.1	17	15.7%	14.0
Total	44	100.0%	18.2	64	100.0%	26.5	108	100.0%	44.7
<b>Race/Ethnicity</b>									
White	33	75.0%	14.6	55	85.9%	24.3	88	81.5%	38.9
Black	7	15.9%	88.8	8	12.5%	101.5	15	13.9%	190.3
Hispanic	2	4.5%	40.2	1	1.6%	20.1	3	2.8%	60.2
Asian	1	2.3%	68.9	0	0.0%	0.0	1	0.9%	68.9
American Indian	1	2.3%	101.1	0	0.0%	0.0	1	0.9%	101.1
Other/Unknown	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	44	100.0%	18.2	64	100.0%	26.5	108	100.0%	44.7
<b>Race/Ethnicity-Males</b>									
White Male	31	81.6%	27.7	47	88.7%	42.1	78	85.7%	69.8
Black Male	4	10.5%	79.6	5	9.4%	99.5	9	9.9%	179.1
Hispanic Male	2	5.3%	75.6	1	1.9%	37.8	3	3.3%	113.4
Asian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Male	1	2.6%	191.2	0	0.0%	0.0	1	1.1%	191.2
Other/Unknown Male	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	38	100.0%	31.5	53	100.0%	43.9	91	100.0%	75.4
<b>Race/Ethnicity-Females</b>									
White Female	2	33.3%	1.7	8	72.7%	7.0	10	58.8%	8.7
Black Female	3	50.0%	105.0	3	27.3%	105.0	6	35.3%	209.9
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian Female	1	16.7%	135.5	0	0.0%	0.0	1	5.9%	135.5
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	6	100.0%	5.0	11	100.0%	9.1	17	100.0%	14.0
<b>Current Age<sup>‡</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
19-24	7	15.9%	32.1	1	1.6%	4.6	8	7.4%	36.7
25-44	18	40.9%	28.7	19	29.7%	30.2	37	34.3%	58.9
45-64	18	40.9%	29.5	40	62.5%	65.7	58	53.7%	95.2
65+	1	2.3%	2.6	4	6.3%	10.4	5	4.6%	13.0
Total	44	100.0%	18.2	64	100.0%	26.5	108	100.0%	44.7

<sup>†</sup>Includes persons diagnosed with HIV disease in the Northwest HIV Region who are currently living, regardless of current residence.

\*Cases which remained HIV cases at the end of 2008.

\*\*Cases classified as AIDS by December 31, 2008.

\*\*\*The sum of HIV cases and AIDS cases.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

<sup>‡</sup>Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

**Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Northwest HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>
<b>Sex</b>									
Male	9	100.0%	7.5	2	66.7%	1.7	11	91.7%	9.1
Female	0	0.0%	0.0	1	33.3%	0.8	1	8.3%	0.8
Total	9	100.0%	3.7	3	100.0%	1.2	12	100.0%	5.0
<b>Race/Ethnicity</b>									
White	8	88.9%	3.5	3	100.0%	1.3	11	91.7%	4.9
Black	1	11.1%	12.7	0	0.0%	0.0	1	8.3%	12.7
Hispanic	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	9	100.0%	3.7	3	100.0%	1.2	12	100.0%	5.0
<b>Race/Ethnicity-Males</b>									
White Male	8	88.9%	7.2	2	100.0%	1.8	10	90.9%	8.9
Black Male	1	11.1%	19.9	0	0.0%	0.0	1	9.1%	19.9
Hispanic Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Male	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	9	100.0%	7.5	2	100.0%	1.7	11	100.0%	9.1
<b>Race/Ethnicity-Females</b>									
White Female	0	--	0.0	1	100.0%	0.9	1	100.0%	0.9
Black Female	0	--	0.0	0	0.0%	0.0	0	0.0%	0.0
Hispanic Female	0	--	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian Female	0	--	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Female	0	--	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	0	--	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	0	--	0.0	1	100.0%	0.8	1	100.0%	0.8
<b>Current Age<sup>†</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
19-24	3	33.3%	13.8	1	33.3%	4.6	4	33.3%	18.4
25-44	4	44.4%	6.4	2	66.7%	3.2	6	50.0%	9.6
45-64	2	22.2%	3.3	0	0.0%	0.0	2	16.7%	3.3
65+	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	9	100.0%	3.7	3	100.0%	1.2	12	100.0%	5.0

\*HIV cases diagnosed during 2008 which remained HIV cases at the end of the year.

\*\*AIDS cases initially diagnosed in 2008.

\*\*\*The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2008 with HIV, which progressed to AIDS in 2008.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

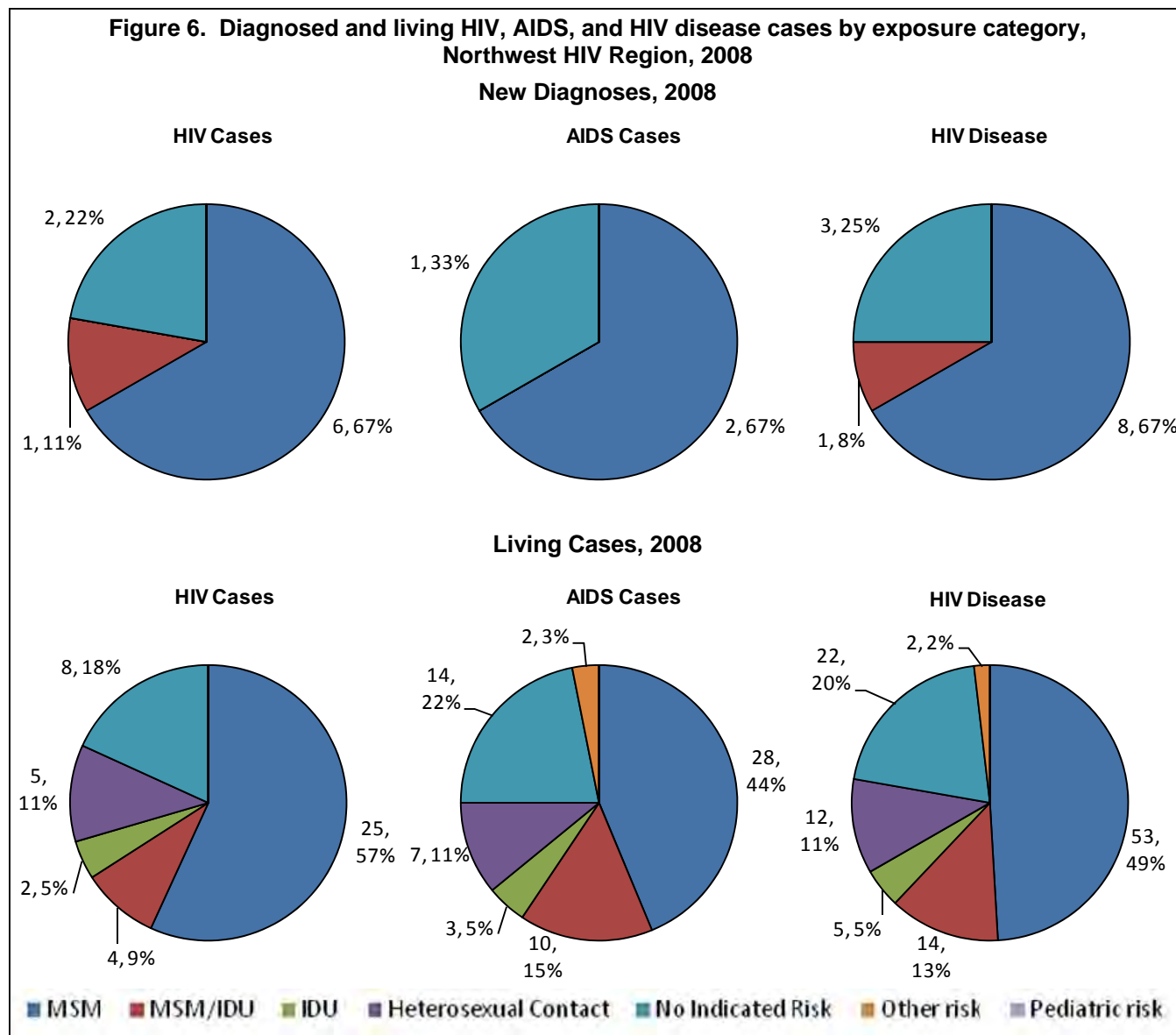
†Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

## Epi Profiles Summary: Northwest HIV Region

Of the 108 persons living with HIV at the end of 2008, 84% were males (Table 1). The rate of those living with HIV disease was 5.4 times greater among males than females. Although whites represented the largest proportion of living HIV disease cases (81%), the rate of those living with HIV disease was 4.9 times greater among blacks than whites. The rate was 1.5 times greater among Hispanics than whites. However, the number of Hispanics living with HIV disease was small, and the results should be interpreted with caution. Blacks comprised a larger proportion of female cases living with HIV disease (35%) compared to male cases (10%). The majority of living HIV disease cases were 45-64 years old at the end of 2008 (54%).

Of the 12 newly diagnosed with HIV disease in 2008, 25% were classified as AIDS cases by the end of 2008 (Table 2). Males represented 92% of new diagnoses. The majority of all new HIV and AIDS cases diagnosed occurred among whites (92%). The greatest proportion of new diagnoses occurred among individuals 25-44 years of age (50%).



Among all categories, the majority of cases were attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

**Table 3. New and living HIV and AIDS cases and rates, by geographic area, Northwest HIV Region, 2008**

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2008*			Living			Diagnosed 2008**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Buchanan County	4	44.4%	4.6	28	63.6%	32.4	2	66.7%	2.3	37	57.8%	42.8
Clinton County	0	0.0%	0.0	4	9.1%	19.1	0	0.0%	0.0	3	4.7%	14.4
Andrew County	0	0.0%	0.0	1	2.3%	5.9	0	0.0%	0.0	3	4.7%	17.8
Caldwell County	0	0.0%	0.0	2	4.5%	21.5	0	0.0%	0.0	3	4.7%	32.3
Nodaway County	3	33.3%	13.6	5	11.4%	22.6	0	0.0%	0.0	3	4.7%	13.6
Remainder of Region	2	22.2%	2.3	4	9.1%	4.6	1	33.3%	1.2	15	23.4%	17.4
<b>NORTHWEST HIV REGION</b>	<b>9</b>	<b>100.0%</b>	<b>3.7</b>	<b>44</b>	<b>100.0%</b>	<b>18.2</b>	<b>3</b>	<b>100.0%</b>	<b>1.2</b>	<b>64</b>	<b>100.0%</b>	<b>26.5</b>

\*HIV cases diagnosed and reported to the Department during 2008 which remained HIV cases at the end of the year.

\*\*Does not include HIV cases that progressed to AIDS.

\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

Note: Percentages may not total due to rounding.

The greatest proportions of new and living HIV and AIDS cases were diagnosed in Buchanan County (Table 3). In Buchanan County, 59% of living HIV disease cases progressed to AIDS by the end of 2008. The rate of individuals living with AIDS was greater than the rate living with HIV in Buchanan County.

**Table 4. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Northwest HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	6	100.0%	23	92.0%	2	100.0%	26	92.9%
Black	0	0.0%	2	8.0%	0	0.0%	2	7.1%
Hispanic	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Other/Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>6</b>	<b>100.0%</b>	<b>25</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Northwest HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	4	8.2%	2	50.0%	0	--	6	11.3%
25-44	11	22.4%	0	0.0%	0	--	11	20.8%
45-64	32	65.3%	2	50.0%	0	--	34	64.2%
65+	2	4.1%	0	0.0%	0	--	2	3.8%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>49</b>	<b>100.0%</b>	<b>4</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>53</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 6. Living HIV disease cases in men who have sex with men, by geographic area, Northwest HIV Region, 2008**

Geographic Area	Cases	%
Buchanan County	36	67.9%
Remaining Counties	17	32.1%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>53</b>	<b>100.0%</b>

There were a total of eight new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2008 for the Northwest HIV region (Table 4). All new diagnoses occurred among whites. There were 53 living HIV disease cases attributed to MSM in the Northwest HIV region. Whites represented 92% of living HIV cases and 93% of living AIDS cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). Among white MSM living with HIV disease the greatest proportion (65%) was between 45-64 years of age at the end of 2008. Black MSM living with HIV disease were equally divided between individuals 19-24 years of age and 45-64 years of age. The total number of black MSM living with HIV disease was small.

Buchanan County residents accounted for the largest number of living MSM in the Northwest HIV region (Table 6).

**Table 7. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Northwest HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	1	100.0%	3	75.0%	0	--	9	90.0%
Black	0	0.0%	0	0.0%	0	--	1	10.0%
Hispanic	0	0.0%	0	0.0%	0	--	0	0.0%
Other/Unknown	0	0.0%	1	25.0%	0	--	0	0.0%
<b>NORTHWEST REGION TOTAL</b>	<b>1</b>	<b>100.0%</b>	<b>4</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>10</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Northwest HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	0	0.0%	0	0.0%	0	--	0	0.0%
25-44	6	50.0%	0	0.0%	0	--	6	42.9%
45-64	6	50.0%	1	100.0%	0	--	8	57.1%
65+	0	0.0%	0	0.0%	0	--	0	0.0%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>12</b>	<b>100.0%</b>	<b>1</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>14</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, Northwest HIV Region, 2008**

Geographic Area	Cases	%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>14</b>	<b>100.0%</b>

There was one new HIV disease diagnosis attributed to men who have sex with men and inject drugs (MSM/IDU) in 2008 for the Northwest HIV region (Table 7). There were 14 MSM/IDU living with HIV disease at the end of 2008 whose most recent diagnosis occurred in the Northwest region. Whites represented the largest proportion of both living HIV and AIDS cases.

Overall, the majority of MSM/IDU living with HIV disease were between 45-64 years of age at the end of 2008 (Table 8).

**Table 10. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Northwest HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	1	50.0%	0	--	2	66.7%
Black Male	0	--	1	50.0%	0	--	1	33.3%
Hispanic Male	0	--	0	0.0%	0	--	0	0.0%
White Female	0	--	0	0.0%	0	--	0	0.0%
Black Female	0	--	0	0.0%	0	--	0	0.0%
Hispanic Female	0	--	0	0.0%	0	--	0	0.0%
<b>NORTHWEST HIV REGION TOTAL<sup>†</sup></b>	<b>0</b>	<b>--</b>	<b>2</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>3</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 11. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, Northwest HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	--	0	--	0	0.0%
19-24	0	0.0%	0	0.0%	0	--	0	--	0	0.0%
25-44	1	33.3%	1	50.0%	0	--	0	--	2	40.0%
45-64	2	66.7%	1	50.0%	0	--	0	--	3	60.0%
65+	0	0.0%	0	0.0%	0	--	0	--	0	0.0%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>3</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>0</b>	<b>--</b>	<b>5</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 12. Living HIV disease cases in injecting drug users, by geographic area, Northwest HIV Region, 2008**

Geographic Area	Cases	%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>5</b>	<b>100.0%</b>

There were no new HIV disease diagnoses attributed to injecting drug users (IDU) in 2008 for the Northwest HIV region (Table 10). There were five living HIV disease cases attributed to IDU at the end of 2008 in the Northwest HIV region. Of the living HIV disease cases, 60% were classified as AIDS at the end of 2008. Males represented all living cases among IDU.

Among IDU living with HIV disease, three were between 45-64 years old and two were 25-44 years old at the end of 2008 (Table 11).

**Table 13. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Northwest HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	1	20.0%	0	--	0	0.0%
Black Male	0	--	0	0.0%	0	--	0	0.0%
Hispanic Male	0	--	0	0.0%	0	--	0	0.0%
White Female	0	--	2	40.0%	0	--	5	71.4%
Black Female	0	--	2	40.0%	0	--	2	28.6%
Hispanic Female	0	--	0	0.0%	0	--	0	0.0%
<b>NORTHWEST HIV REGION TOTAL<sup>†</sup></b>	<b>0</b>	<b>--</b>	<b>5</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>7</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Northwest HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	--	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	--	0	0.0%	0	0.0%	0	0.0%
25-44	0	0.0%	0	--	3	42.9%	3	75.0%	6	50.0%
45-64	1	100.0%	0	--	3	42.9%	1	25.0%	5	41.7%
65+	0	0.0%	0	--	1	14.3%	0	0.0%	1	8.3%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>1</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>7</b>	<b>100.0%</b>	<b>4</b>	<b>100.0%</b>	<b>12</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

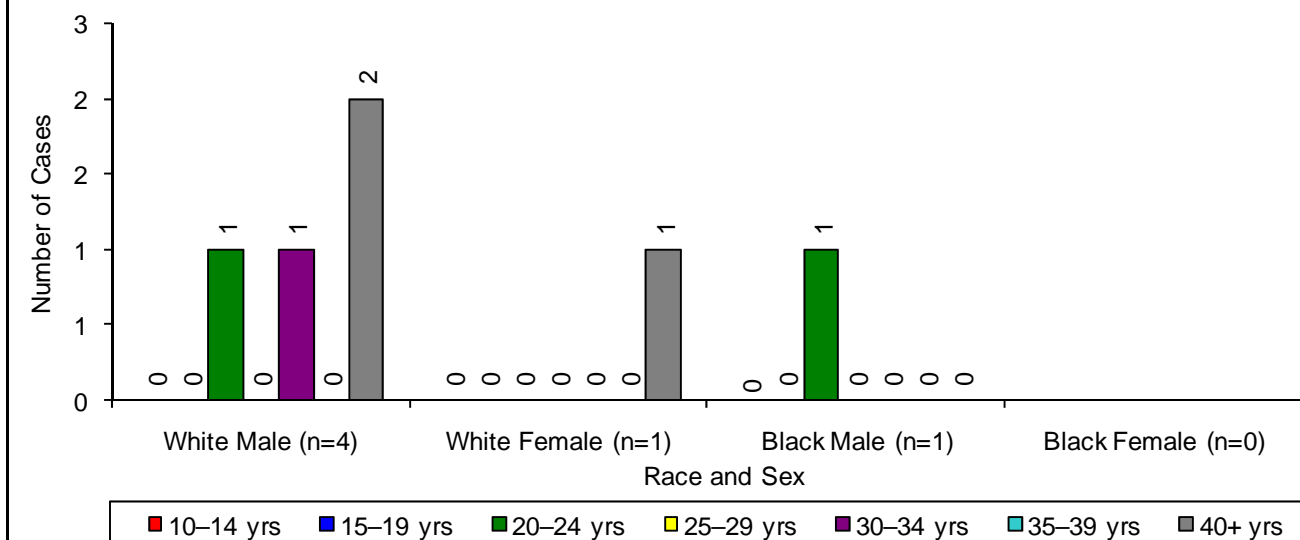
**Table 15. Living HIV disease cases in heterosexual contacts, by geographic area, Northwest HIV Region, 2008**

Geographic Area	Total	
	Cases	%
Buchanan County	7	58.3%
Remaining Counties	5	41.7%
<b>NORTHWEST HIV REGION TOTAL</b>	<b>12</b>	<b>100.0%</b>

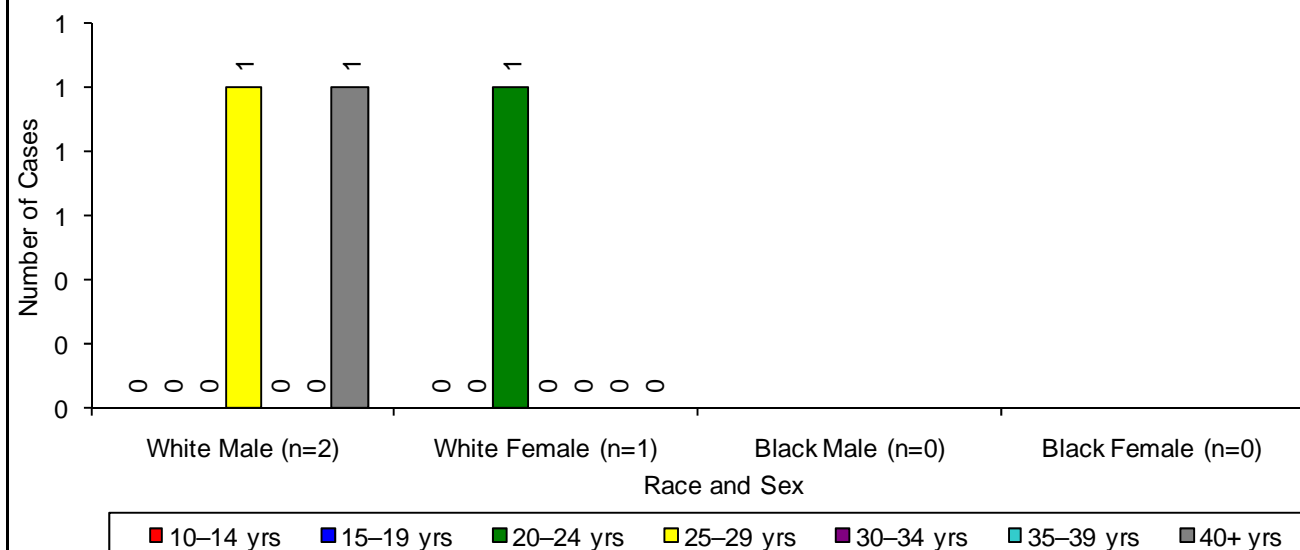
There were no new HIV disease diagnoses attributed to heterosexual contact in 2008 for the Northwest HIV region (Table 13). There were 12 living HIV disease cases attributed to heterosexual contact at the end of 2008 in the Northwest HIV region. Of the living cases, 58% progressed to AIDS at the end of 2008. Females represented all but one of the living HIV disease cases.

At the end of 2008, persons 25-44 years of age comprised the largest proportion of heterosexual contact cases living with HIV disease in the Northwest HIV region (Table 14).

**Figure 7. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Northwest Region, 2008**



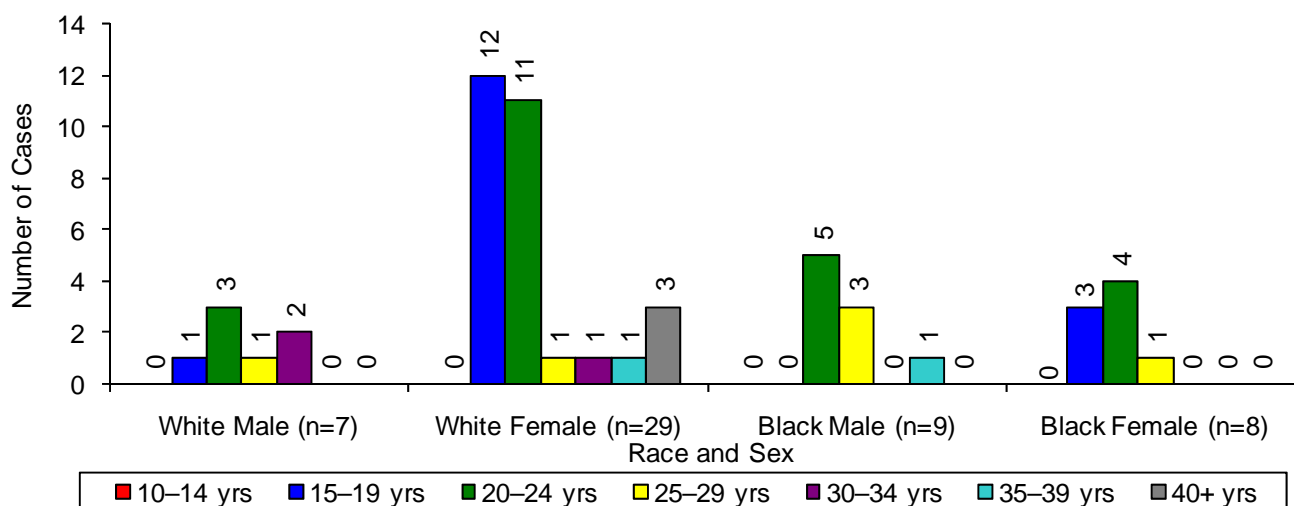
**Figure 8. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Northwest Region, 2008**



The largest number of P&S syphilis cases was reported among white males (4) (Figure 7). No cases of P&S syphilis were reported among black females in the Northwest HIV region in 2008. The number of reported cases decreased from 2007 to 2008 among white males (5 to 4) and white females (2 to 1), and increased among black males (0 to 1).

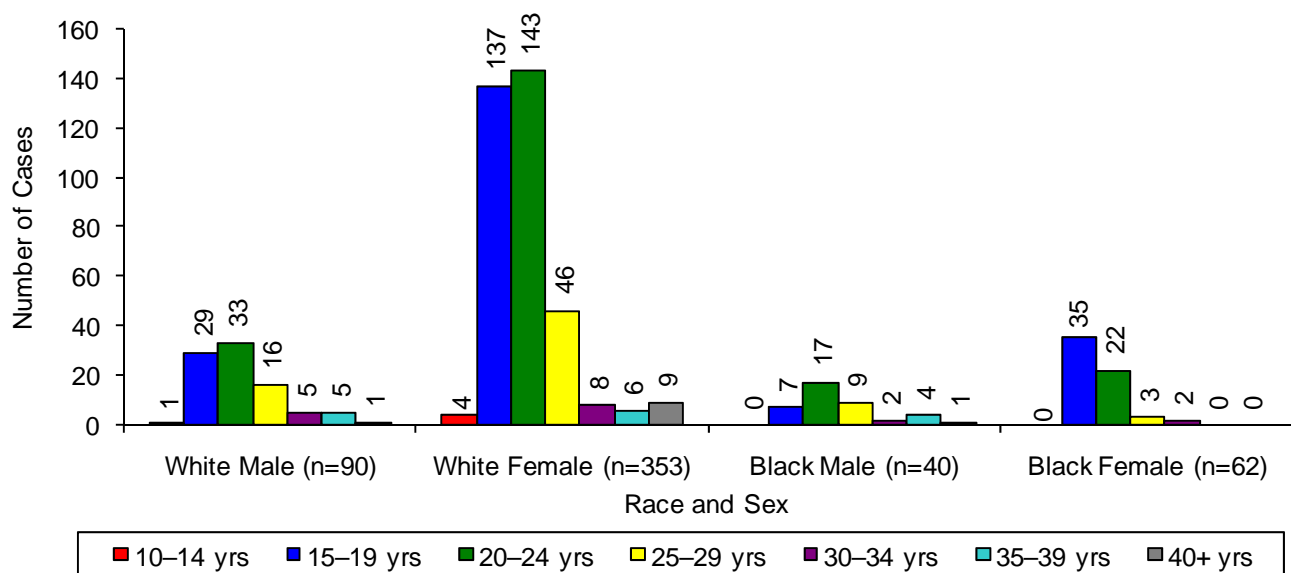
The largest number of early latent syphilis cases was reported among white males (2) (Figure 8). No early latent syphilis cases were reported among black males or females. The number of reported early latent syphilis cases increased from 2007 to 2008 among white males (0 to 2) and white females (0 to 1).

**Figure 9. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Northwest Region, 2008**



Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

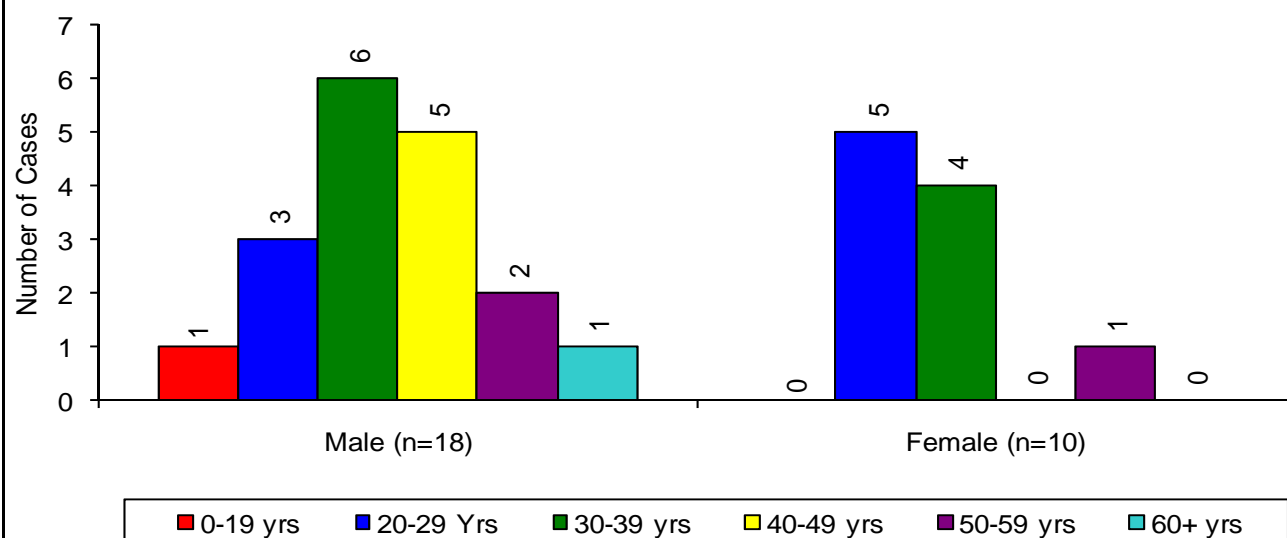
**Figure 10. Reported chlamydia cases, by race and sex, by age group at diagnosis, Northwest Region, 2008**



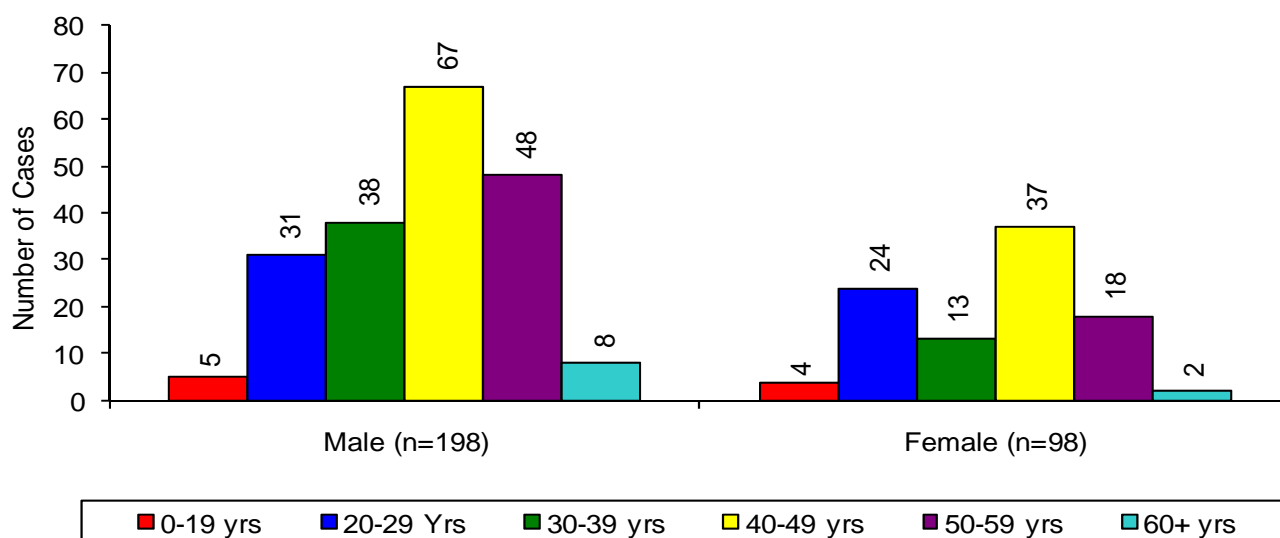
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among white females (29), followed by black males (9) (Figure 9). The number of reported cases decreased from 2007 to 2008 among all race/ethnicity and sex categories presented. The number of reported cases from 2007 to 2008 declined by 61% (74 to 29) among white females and by 72% among black males (32 to 9). The largest numbers of reported cases were diagnosed between 20-24 years of age among white males, black males, and black females. Among white females, the largest numbers of reported cases were diagnosed between 15-19 years of age, and among those diagnosed between 20-24 years of age.

The largest numbers of chlamydia cases were reported among white females (353) and white males (90). The number of reported chlamydia cases decreased from 2007 to 2008 among all race/ethnicity and sex categories presented, except black females. Among black females the number of reported cases increased by one from 2007 to 2008. Among black females, individuals 15-19 years of age represented the largest number of reported cases. Among all other race/ethnicity and sex categories presented the largest number of reported cases was diagnosed between 20-24 years of age.

**Figure 11. Reported Hepatitis B cases, by sex and by age group at diagnosis, Northwest Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

**Figure 12. Reported Hepatitis C cases, by sex and by age group at diagnosis, Northwest Region, 2008**

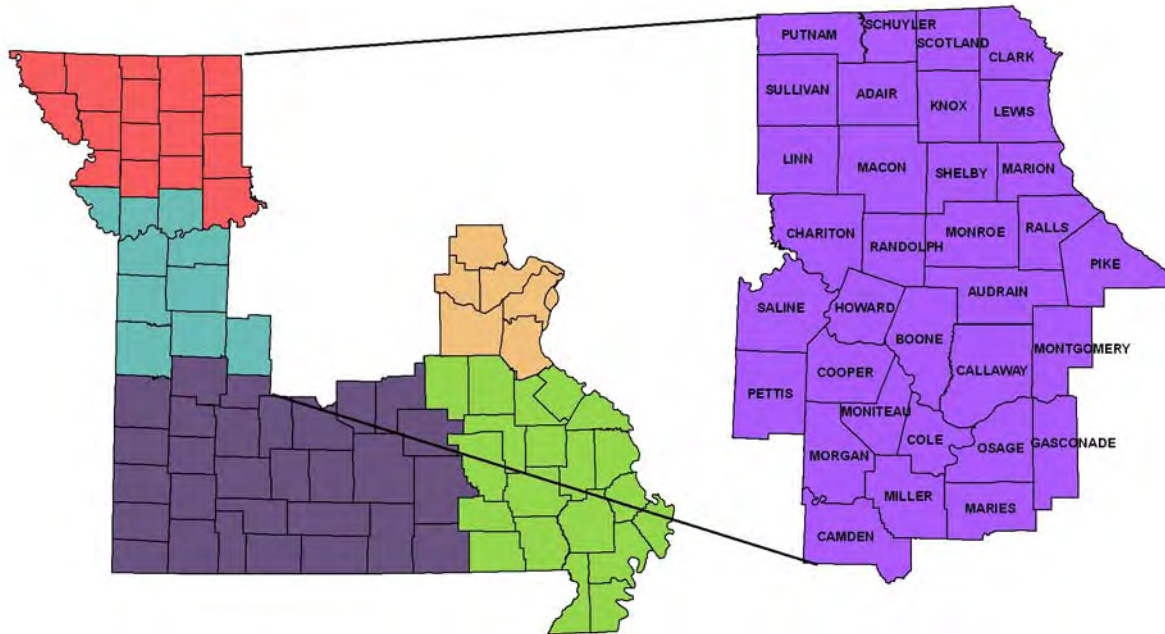
Note: Totals include persons whose age at diagnosis is unknown.

There were 28 reported cases of Hepatitis B in the Northwest HIV region during 2008 (Figure 11). Females represented 36% of reported Hepatitis B cases, which was lower than the proportion of females cases reported in Missouri overall (53%). There were differences in the age distribution of reported Hepatitis B cases by sex. Among males, the largest proportion of cases was between 30-39 years of age at diagnosis. Those 20-29 years of age represented the largest proportion of cases among females.

In 2008, there were 296 Hepatitis C cases reported in the Northwest HIV region (Figure 12). Of the reported Hepatitis C cases, 67% were male. There were differences in the age distribution of reported Hepatitis C cases by sex. A greater proportion of males was diagnosed at 50 years of age or greater (28%) compared to females (20%). However, among both males and females the largest numbers of cases were between 40-49 years of age.

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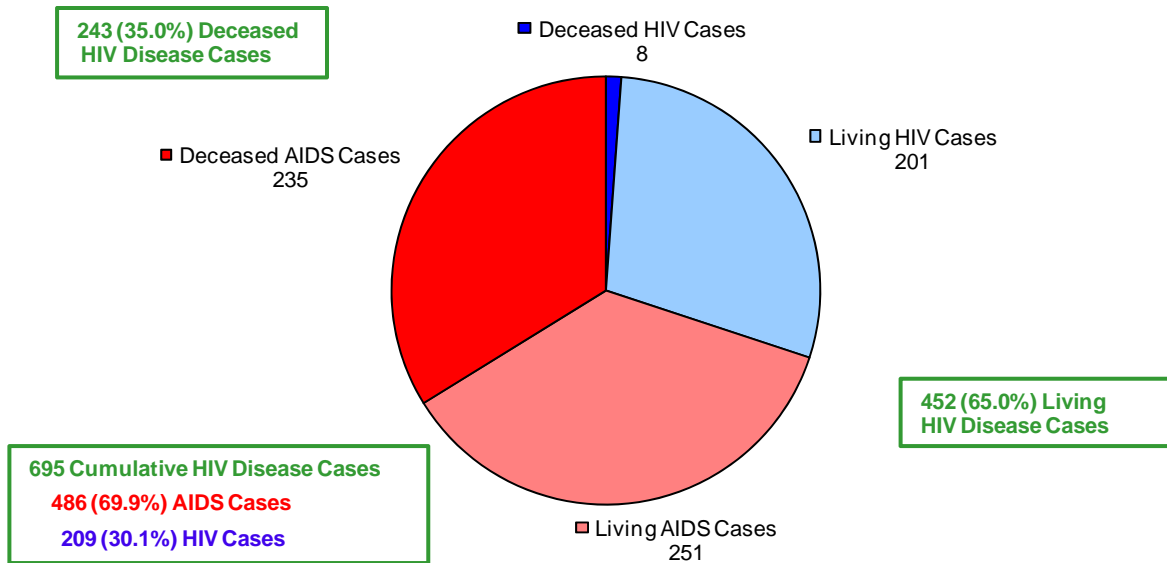
# NORTH CENTRAL REGION



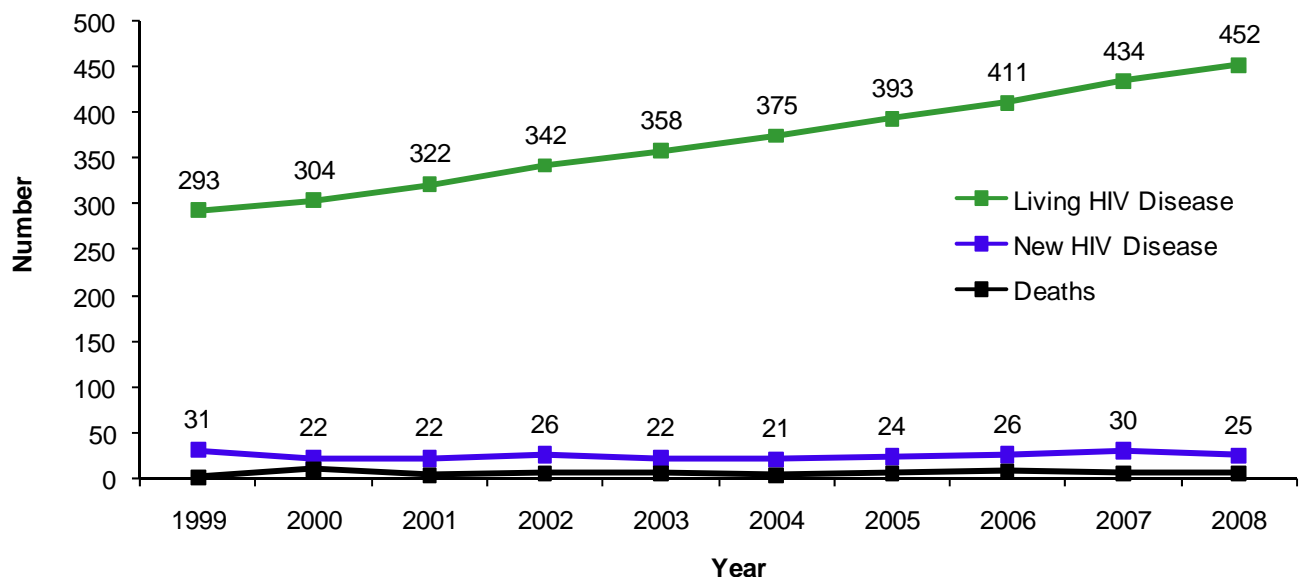
**Population Estimates, North Central HIV Region, 2007**

County	White		Black		Hispanic		American Indian		Asian		Total
Adair County	23,156	94.0%	456	1.9%	434	1.8%	63	0.3%	533	2.2%	24,642
Audrain County	23,168	89.5%	2,230	8.6%	295	1.1%	89	0.3%	110	0.4%	25,892
Boone County	128,561	84.3%	14,132	9.3%	3,735	2.5%	690	0.5%	5,317	3.5%	152,435
Callaway County	39,657	91.3%	2,512	5.8%	598	1.4%	248	0.6%	413	1.0%	43,428
Camden County	39,116	96.6%	294	0.7%	645	1.6%	209	0.5%	223	0.6%	40,487
Chariton County	7,495	95.6%	271	3.5%	51	0.7%	14	0.2%	12	0.2%	7,843
Clark County	7,078	98.0%	26	0.4%	79	1.1%	30	0.4%	7	0.1%	7,220
Cole County	63,140	85.7%	7,905	10.7%	1,271	1.7%	317	0.4%	1,065	1.4%	73,698
Cooper County	15,553	88.7%	1,607	9.2%	257	1.5%	75	0.4%	51	0.3%	17,543
Gasconade County	15,128	98.2%	68	0.4%	133	0.9%	30	0.2%	40	0.3%	15,399
Howard County	8,970	90.8%	726	7.3%	114	1.2%	45	0.5%	24	0.2%	9,879
Knox County	4,001	98.6%	16	0.4%	26	0.6%	2	0.0%	13	0.3%	4,058
Lewis County	9,576	95.4%	333	3.3%	83	0.8%	21	0.2%	27	0.3%	10,040
Linn County	12,321	97.1%	143	1.1%	156	1.2%	50	0.4%	19	0.1%	12,689
Macon County	14,861	95.4%	457	2.9%	163	1.0%	66	0.4%	29	0.2%	15,576
Maries County	8,818	96.7%	82	0.9%	150	1.6%	53	0.6%	12	0.1%	9,115
Marion County	26,045	92.4%	1,598	5.7%	346	1.2%	80	0.3%	105	0.4%	28,174
Miller County	24,208	97.2%	192	0.8%	316	1.3%	122	0.5%	60	0.2%	24,898
Moniteau County	13,878	91.5%	619	4.1%	537	3.5%	67	0.4%	66	0.4%	15,167
Monroe County	8,652	94.0%	390	4.2%	86	0.9%	45	0.5%	32	0.3%	9,205
Montgomery County	11,323	95.0%	330	2.8%	114	1.0%	35	0.3%	118	1.0%	11,920
Morgan County	20,230	97.2%	188	0.9%	215	1.0%	139	0.7%	48	0.2%	20,820
Osage County	13,199	98.6%	38	0.3%	93	0.7%	34	0.3%	29	0.2%	13,393
Pettis County	36,098	88.5%	1,414	3.5%	2,767	6.8%	189	0.5%	339	0.8%	40,807
Pike County	16,100	87.2%	1,767	9.6%	515	2.8%	44	0.2%	45	0.2%	18,471
Putnam County	4,854	98.8%	4	0.1%	41	0.8%	5	0.1%	9	0.2%	4,913
Ralls County	9,595	97.5%	128	1.3%	78	0.8%	20	0.2%	21	0.2%	9,842
Randolph County	23,098	90.3%	1,804	7.0%	374	1.5%	130	0.5%	184	0.7%	25,590
Saline County	19,353	85.3%	1,384	6.1%	1,712	7.5%	62	0.3%	190	0.8%	22,701
Schuyler County	4,037	98.4%	11	0.3%	30	0.7%	13	0.3%	11	0.3%	4,102
Scotland County	4,743	98.5%	11	0.2%	43	0.9%	8	0.2%	9	0.2%	4,814
Shelby County	6,342	97.4%	89	1.4%	47	0.7%	22	0.3%	9	0.1%	6,509
Sullivan County	5,660	84.8%	31	0.5%	955	14.3%	13	0.2%	16	0.2%	6,675
Region Total	668,014	90.5%	41,256	5.6%	16,459	2.2%	3,030	0.4%	9,186	1.2%	737,945

**Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, North Central HIV Region, 1982—2008**



**Figure 2. Living and new HIV disease cases and deaths by year\*, North Central HIV Region, 1999—2008**

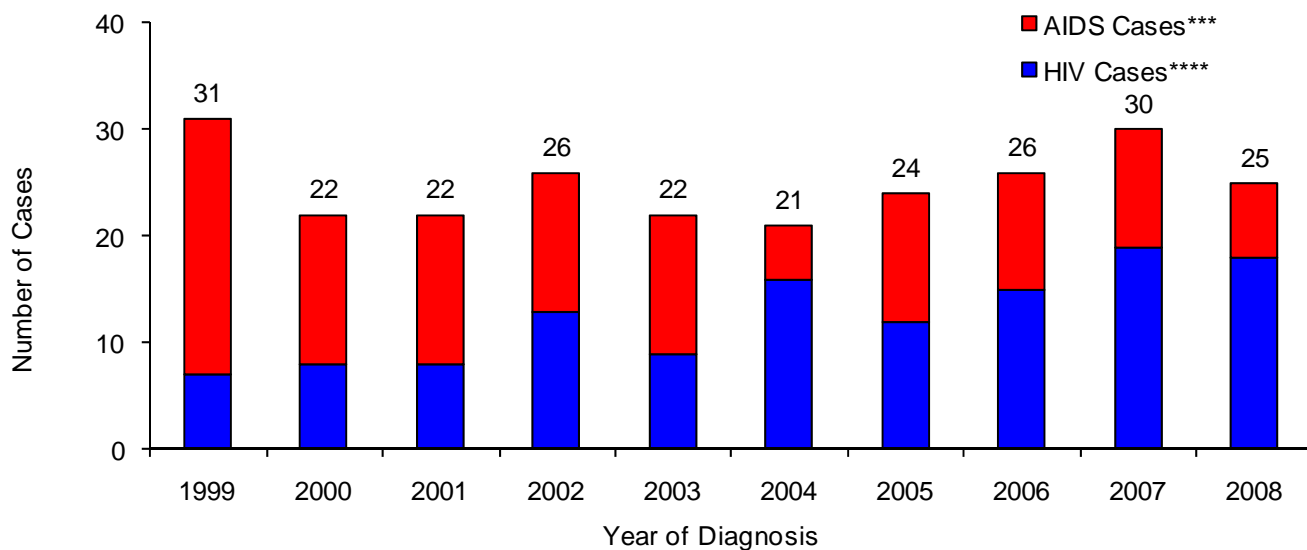


\*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year, For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2008, there have been a total of 695 HIV disease cases diagnosed in the North Central HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 65% were still presumed to be living with HIV disease at the end of 2008. Among those living with HIV disease, 201 were classified as HIV cases at the end of 2008 and 251 were classified as AIDS cases.

At the end of 2008, there were 452 persons living with HIV disease whose most recent diagnosis occurred in the North Central HIV region (Figure 2). The number of people living with HIV disease increased every year from 1999 to 2008. There were 25 new HIV disease diagnoses in 2008. The number of new diagnoses and the number of deaths among persons with HIV disease has remained generally stable.

**Figure 3. HIV disease cases, by current status\* and year of diagnosis\*\*, North Central HIV Region, 1999—2008**



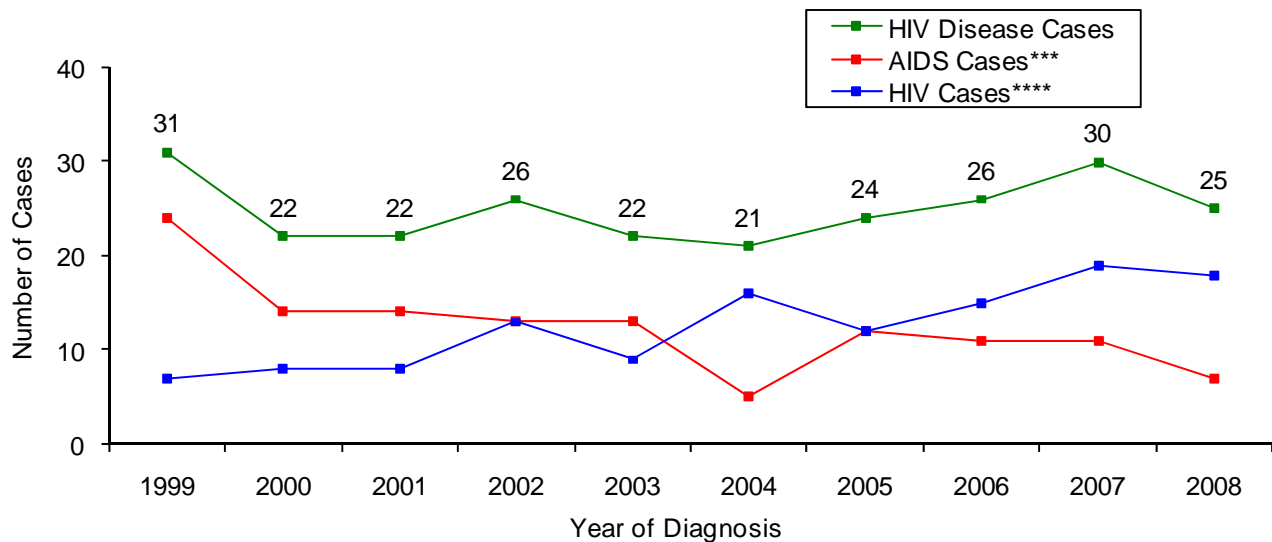
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

**Figure 4. Reported HIV disease cases, by current status\* and year of diagnosis\*\*, North Central HIV Region, 1999—2008**



\*HIV case vs. AIDS case

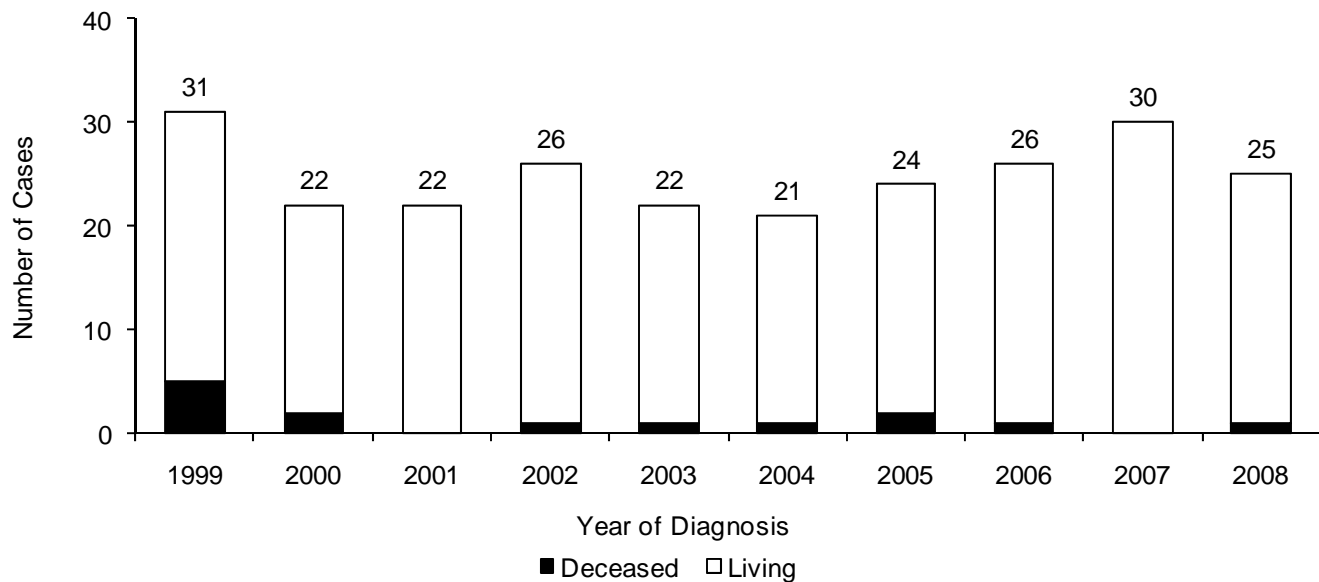
\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

The number of new diagnoses was generally stable, with slight fluctuations seen from 1999-2008 in the North Central HIV region (Figures 3 and 4). Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

**Figure 5. Persons diagnosed with HIV disease by current vital status\* and year of diagnosis\*\*, North Central HIV Region, 1999—2008**



\*Vital status on December 31, 2008.

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

Of the 31 persons diagnosed with HIV disease in 1999, five (16%) were deceased by the end of 2008 (Figure 5). Among the 25 persons first diagnosed in 2008, one (4%) was deceased at the end of 2008. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease. Among persons diagnosed in 2001 and 2007, no deaths have been reported to MDHSS.

**Table 1. Living<sup>†</sup> HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, North Central HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
<b>Sex</b>									
Male	154	76.6%	42.1	195	77.7%	53.4	349	77.2%	95.5
Female	47	23.4%	12.6	56	22.3%	15.0	103	22.8%	27.7
Total	201	100.0%	27.2	251	100.0%	34.0	452	100.0%	61.3
<b>Race/Ethnicity</b>									
White	137	68.2%	20.5	177	70.5%	26.5	314	69.5%	47.0
Black	51	25.4%	123.6	62	24.7%	150.3	113	25.0%	273.9
Hispanic	11	5.5%	66.8	10	4.0%	60.8	21	4.6%	127.6
Asian	1	0.5%	10.9	1	0.4%	10.9	2	0.4%	21.8
American Indian	0	0.0%	0.0	1	0.4%	33.0	1	0.2%	33.0
Other/Unknown	1	0.5%	N/A	0	0.0%	N/A	1	0.2%	N/A
Total	201	100.0%	27.2	251	100.0%	34.0	452	100.0%	61.3
<b>Race/Ethnicity-Males</b>									
White Male	108	70.1%	32.9	146	74.9%	44.5	254	72.8%	77.4
Black Male	36	23.4%	161.5	40	20.5%	179.4	76	21.8%	340.9
Hispanic Male	9	5.8%	101.3	7	3.6%	78.8	16	4.6%	180.0
Asian Male	0	0.0%	0.0	1	0.5%	21.4	1	0.3%	21.4
American Indian Male	0	0.0%	0.0	1	0.5%	63.6	1	0.3%	63.6
Other/Unknown Male	1	0.6%	N/A	0	0.0%	N/A	1	0.3%	N/A
Total	154	100.0%	42.1	195	100.0%	53.4	349	100.0%	95.5
<b>Race/Ethnicity-Females</b>									
White Female	29	61.7%	8.5	31	55.4%	9.1	60	58.3%	17.6
Black Female	15	31.9%	79.1	22	39.3%	116.0	37	35.9%	195.1
Hispanic Female	2	4.3%	26.4	3	5.4%	39.6	5	4.9%	66.0
Asian Female	1	2.1%	22.2	0	0.0%	0.0	1	1.0%	22.2
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	47	100.0%	12.6	56	100.0%	15.0	103	100.0%	27.7
<b>Current Age<sup>‡</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	3	1.5%	3.0	1	0.4%	1.0	4	0.9%	4.0
13-18	0	0.0%	0.0	2	0.8%	3.3	2	0.4%	3.3
19-24	7	3.5%	9.5	4	1.6%	5.4	11	2.4%	14.9
25-44	120	59.7%	61.2	103	41.0%	52.6	223	49.3%	113.8
45-64	68	33.8%	37.0	131	52.2%	71.3	199	44.0%	108.4
65+	3	1.5%	2.9	10	4.0%	9.6	13	2.9%	12.4
Total	201	100.0%	27.2	251	100.0%	34.0	452	100.0%	61.3

<sup>†</sup>Includes persons diagnosed with HIV disease in the North Central HIV Region who are currently living, regardless of current residence.

\*Cases which remained HIV cases at the end of 2008.

\*\*Cases classified as AIDS by December 31, 2008.

\*\*\*The sum of HIV cases and AIDS cases.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

<sup>‡</sup>Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

**Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, North Central HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>
<b>Sex</b>									
Male	16	88.9%	4.4	7	100.0%	1.9	23	92.0%	6.3
Female	2	11.1%	0.5	0	0.0%	0.0	2	8.0%	0.5
Total	18	100.0%	2.4	7	100.0%	0.9	25	100.0%	3.4
<b>Race/Ethnicity</b>									
White	10	55.6%	1.5	4	57.1%	0.6	14	56.0%	2.1
Black	7	38.9%	17.0	2	28.6%	4.8	9	36.0%	21.8
Hispanic	1	5.6%	6.1	1	14.3%	6.1	2	8.0%	12.2
Asian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	18	100.0%	2.4	7	100.0%	0.9	25	100.0%	3.4
<b>Race/Ethnicity-Males</b>									
White Male	9	56.3%	2.7	4	57.1%	1.2	13	56.5%	4.0
Black Male	6	37.5%	26.9	2	28.6%	9.0	8	34.8%	35.9
Hispanic Male	1	6.3%	11.3	1	14.3%	11.3	2	8.7%	22.5
Asian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Male	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	16	100.0%	4.4	7	100.0%	1.9	23	100.0%	6.3
<b>Race/Ethnicity-Females</b>									
White Female	1	50.0%	0.3	0	--	0.0	1	50.0%	0.3
Black Female	1	50.0%	5.3	0	--	0.0	1	50.0%	5.3
Hispanic Female	0	0.0%	0.0	0	--	0.0	0	0.0%	0.0
Asian Female	0	0.0%	0.0	0	--	0.0	0	0.0%	0.0
American Indian Female	0	0.0%	0.0	0	--	0.0	0	0.0%	0.0
Other/Unknown Female	0	0.0%	N/A	0	--	N/A	0	0.0%	N/A
Total	2	100.0%	0.5	0	--	0.0	2	100.0%	0.5
<b>Current Age<sup>†</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
19-24	3	16.7%	4.1	1	14.3%	1.4	4	16.0%	5.4
25-44	11	61.1%	5.6	6	85.7%	3.1	17	68.0%	8.7
45-64	4	22.2%	2.2	0	0.0%	0.0	4	16.0%	2.2
65+	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	18	100.0%	2.4	7	100.0%	0.9	25	100.0%	3.4

\*HIV cases diagnosed during 2008 which remained HIV cases at the end of the year.

\*\*AIDS cases initially diagnosed in 2008.

\*\*\*The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2008 with HIV, which progressed to AIDS in 2008.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

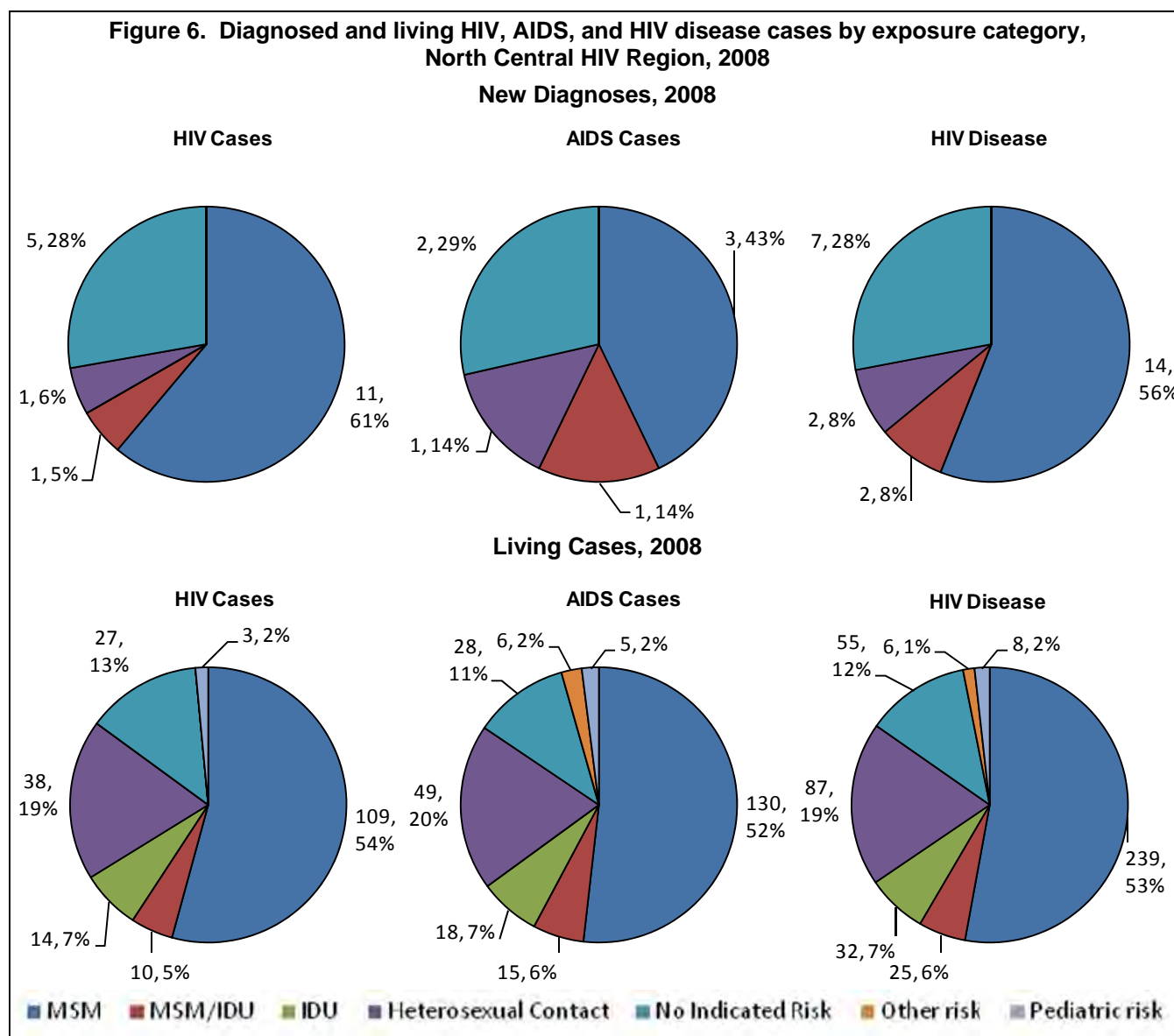
†Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

## Epi Profiles Summary: North Central HIV Region

Of the 452 persons living with HIV at the end of 2008, 77% were males (Table 1). The rate of those living with HIV disease was 3.4 times greater among males than females. The difference in the rates between males and females was smaller than what was observed in Missouri overall. Although whites represented the largest proportion of living HIV disease cases (69%), the rate of those living with HIV disease was 5.8 times greater among blacks than whites. The rate was 2.7 times greater among Hispanics than whites. Among males, the rate of living cases was 4.4 times greater for blacks than whites, and 2.3 times greater for Hispanics than whites. Among females, the rate of those living with HIV disease was 11.1 times greater among blacks than whites, and 3.8 times greater among Hispanics than whites.

Of the 25 persons newly diagnosed with HIV disease in 2008, 28% were classified as AIDS cases by the end of 2008 (Table 2). Males represented 92% of new diagnoses. Whites represented the majority of all new HIV and AIDS cases diagnosed.



Among all categories, the majority of cases were attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

**Table 3. New and living HIV and AIDS cases and rates, by geographic area, North Central HIV Region, 2008**

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2008*			Living			Diagnosed 2008**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Boone County	10	55.6%	6.6	93	46.3%	61.0	0	0.0%	0.0	119	47.4%	78.1
Cole County	4	22.2%	5.4	25	12.4%	33.9	0	0.0%	0.0	16	6.4%	21.7
Callaway County	0	0.0%	0.0	9	4.5%	20.7	3	42.9%	6.9	9	3.6%	20.7
Marion County	0	0.0%	0.0	3	1.5%	10.6	0	0.0%	0.0	7	2.8%	24.8
Pettis County	0	0.0%	0.0	7	3.5%	17.2	1	14.3%	2.5	15	6.0%	36.8
Gasconade County	0	0.0%	0.0	3	1.5%	19.5	0	0.0%	0.0	4	1.6%	26.0
Remainder of Region	4	22.2%	1.0	61	30.3%	15.9	3	42.9%	0.8	81	32.3%	21.1
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>18</b>	<b>100.0%</b>	<b>2.4</b>	<b>201</b>	<b>100.0%</b>	<b>27.2</b>	<b>7</b>	<b>100.0%</b>	<b>0.9</b>	<b>251</b>	<b>100.0%</b>	<b>34.0</b>
*HIV cases diagnosed and reported to the Department during 2008 which remained HIV cases at the end of the year. **Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008. ***Per 100,000 population based on 2007 MDHSS estimates. Note: Percentages may not total due to rounding.												

The number of persons newly diagnosed that remained classified as HIV cases at the end of 2008 was greatest in Boone County (10). The largest number of newly diagnosed persons classified as AIDS cases at the end of 2008 were residents of Callaway County (3) (Table 3). The rate of persons living with HIV disease among those classified as HIV cases and those classified as AIDS cases was highest in Boone County compared to other areas in the North Central HIV region.

**Table 4. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, North Central HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	7	63.6%	77	70.6%	3	100.0%	108	83.1%
Black	3	27.3%	24	22.0%	0	0.0%	19	14.6%
Hispanic	1	9.1%	7	6.4%	0	0.0%	2	1.5%
Other/Unknown	0	0.0%	1	0.9%	0	0.0%	1	0.8%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>11</b>	<b>100.0%</b>	<b>109</b>	<b>100.0%</b>	<b>3</b>	<b>100.0%</b>	<b>130</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, North Central HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	5	2.7%	2	4.7%	0	0.0%	7	2.9%
25-44	84	45.4%	27	62.8%	3	33.3%	114	47.7%
45-64	90	48.6%	14	32.6%	6	66.7%	110	46.0%
65+	6	3.2%	0	0.0%	0	0.0%	8	3.3%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>185</b>	<b>100.0%</b>	<b>43</b>	<b>100.0%</b>	<b>9</b>	<b>100.0%</b>	<b>239</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 6. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, North Central HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Boone County	101	77.7%	23	17.7%	5	3.8%	130	54.4%
Cole County	6	40.0%	8	53.3%	1	6.7%	15	6.3%
Remaining Counties	78	83.0%	12	12.8%	3	3.2%	94	39.3%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>185</b>	<b>77.4%</b>	<b>43</b>	<b>18.0%</b>	<b>9</b>	<b>3.8%</b>	<b>239</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race/ethnicity in each area.

\*\*\*Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of 14 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2008 for the North Central HIV region (Table 4). Whites represented the greatest proportion of new HIV and AIDS case diagnoses. There were 239 living HIV disease cases attributed to MSM in the North Central HIV region. Whites represented a greater proportion among living AIDS cases compared to living HIV cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). Among white and Hispanic MSM living with HIV disease, the greatest proportions, 49% and 67% respectively, were between 45-64 years of age at the end of 2008. In contrast, only 33% of black MSM living with HIV disease were between 45-64 years old.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for MSM (Table 6). A greater proportion of MSM living with HIV disease were black in Cole County (53%) compared to Boone County (18%) and the remainder on the North Central HIV region (13%).

**Table 7. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, North Central HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	1	100.0%	10	100.0%	0	0.0%	11	73.3%
Black	0	0.0%	0	0.0%	0	0.0%	2	13.3%
Hispanic	0	0.0%	0	0.0%	1	100.0%	2	13.3%
Other/Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>NORTH CENTRAL REGION TOTAL</b>	<b>1</b>	<b>100.0%</b>	<b>10</b>	<b>100.0%</b>	<b>1</b>	<b>100.0%</b>	<b>15</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, North Central HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	10	47.6%	2	100.0%	2	100.0%	14	56.0%
45-64	11	52.4%	0	0.0%	0	0.0%	11	44.0%
65+	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>21</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>25</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, North Central HIV Region, 2008**

Geographic Area	Cases	%
Boone County	12	48.0%
Cole County	1	4.0%
Marion County	2	8.0%
Pettis County	2	8.0%
Remaining Counties	8	32.0%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>25</b>	<b>100.0%</b>

There were a total of two new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2008 for the North Central HIV region (Table 7). There were 25 MSM/IDU living with HIV disease at the end of 2008 whose most recent diagnosis occurred in the North Central HIV region. The largest proportion of both living HIV and AIDS cases were white.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 8). The number of living cases among whites was fairly evenly split between those 25-44 and 45-64 years of age. Among blacks and Hispanics attributed to MSM/IDU, all living cases were between 25-44 years of age, although the number of cases was small.

The largest numbers of MSM/IDU living with HIV disease in the North Central HIV were most recently diagnosed in Boone County (12) (Table 9).

**Table 10. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, North Central HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	8	57.1%	0	--	6	33.3%
Black Male	0	--	0	0.0%	0	--	7	38.9%
Hispanic Male	0	--	0	0.0%	0	--	0	0.0%
White Female	0	--	6	42.9%	0	--	3	16.7%
Black Female	0	--	0	0.0%	0	--	2	11.1%
Hispanic Female	0	--	0	0.0%	0	--	0	0.0%
<b>NORTH CENTRAL HIV REGION TOTAL<sup>†</sup></b>	<b>0</b>	<b>--</b>	<b>14</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>18</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 11. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, North Central HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	7.1%	0	0.0%	0	0.0%	0	0.0%	1	3.1%
25-44	6	42.9%	2	28.6%	5	55.6%	1	50.0%	14	43.8%
45-64	6	42.9%	5	71.4%	4	44.4%	1	50.0%	16	50.0%
65+	1	7.1%	0	0.0%	0	0.0%	0	0.0%	1	3.1%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>14</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>9</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>32</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 12. Living HIV disease cases in injecting drug users, by geographic area, North Central HIV Region, 2008**

Geographic Area	Cases	%
Boone County	11	34.4%
Cole County	3	9.4%
Marion County	2	6.3%
Pettis County	1	3.1%
Remaining Counties	15	46.9%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>32</b>	<b>100.0%</b>

There were a no new HIV disease diagnoses attributed to injecting drug users (IDU) in 2008 for the North Central HIV region (Table 10). There were 32 living HIV disease cases attributed to IDU at the end of 2008 in the North Central HIV region. Of persons living with HIV disease, 56% were classified as AIDS at the end of 2008. The largest proportion of living HIV cases were white males (57%), while black males represented the largest proportion of living AIDS cases (32%).

Overall, the largest numbers of persons living with HIV disease among IDU in the North Central HIV region were between 45-64 years of age at the end of 2008 (16), followed closely by individuals 25-44 years old (14) (Table 11).

The largest numbers of IDU living with HIV disease in the North Central HIV were most recently diagnosed in Boone County (12) (Table 12).

**Table 13. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, North Central HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	6	15.8%	0	0.0%	6	12.2%
Black Male	0	0.0%	4	10.5%	1	100.0%	5	10.2%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White Female	1	100.0%	18	47.4%	0	0.0%	26	53.1%
Black Female	0	0.0%	8	21.1%	0	0.0%	9	18.4%
Hispanic Female	0	0.0%	1	2.6%	0	0.0%	2	4.1%
<b>NORTH CENTRAL HIV REGION TOTAL<sup>†</sup></b>	<b>1</b>	<b>100.0%</b>	<b>38</b>	<b>100.0%</b>	<b>1</b>	<b>100.0%</b>	<b>49</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, North Central HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	4	33.3%	6	66.7%	26	59.1%	10	58.8%	50	57.5%
45-64	8	66.7%	3	33.3%	16	36.4%	7	41.2%	35	40.2%
65+	0	0.0%	0	0.0%	2	4.5%	0	0.0%	2	2.3%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>12</b>	<b>100.0%</b>	<b>9</b>	<b>100.0%</b>	<b>44</b>	<b>100.0%</b>	<b>17</b>	<b>100.0%</b>	<b>87</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, North Central HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Boone County	17	56.7%	12	40.0%	1	3.3%	30	34.5%
Cole County	8	57.1%	5	35.7%	0	0.0%	14	16.1%
Remaining Counties	31	72.1%	9	20.9%	2	4.7%	43	49.4%
<b>NORTH CENTRAL HIV REGION TOTAL</b>	<b>56</b>	<b>64.4%</b>	<b>26</b>	<b>29.9%</b>	<b>3</b>	<b>3.4%</b>	<b>87</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race in each area.

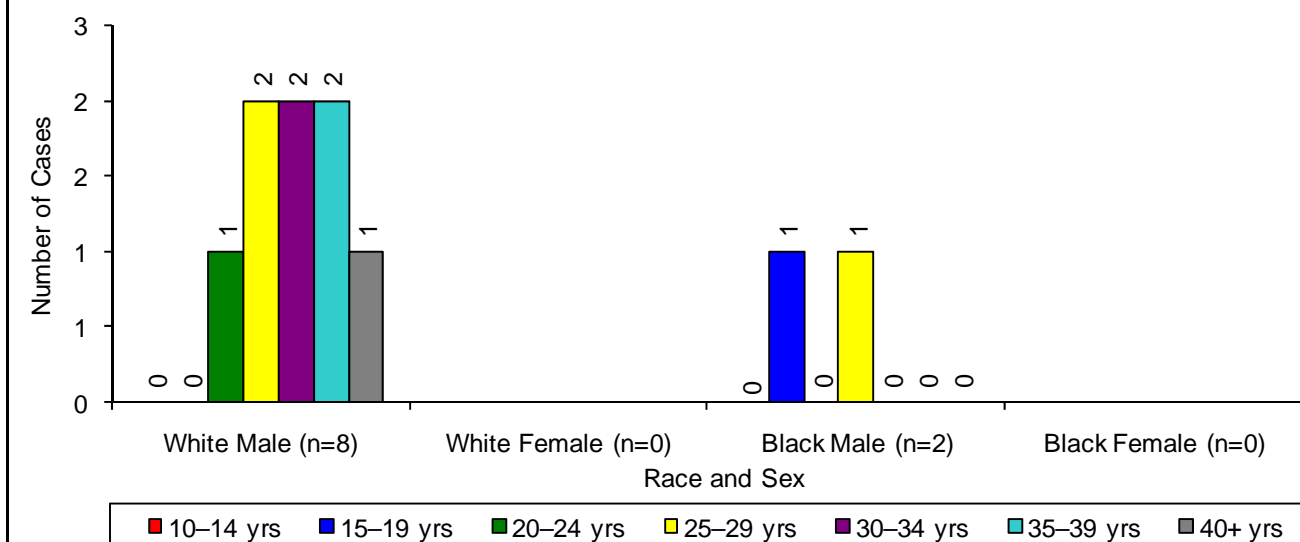
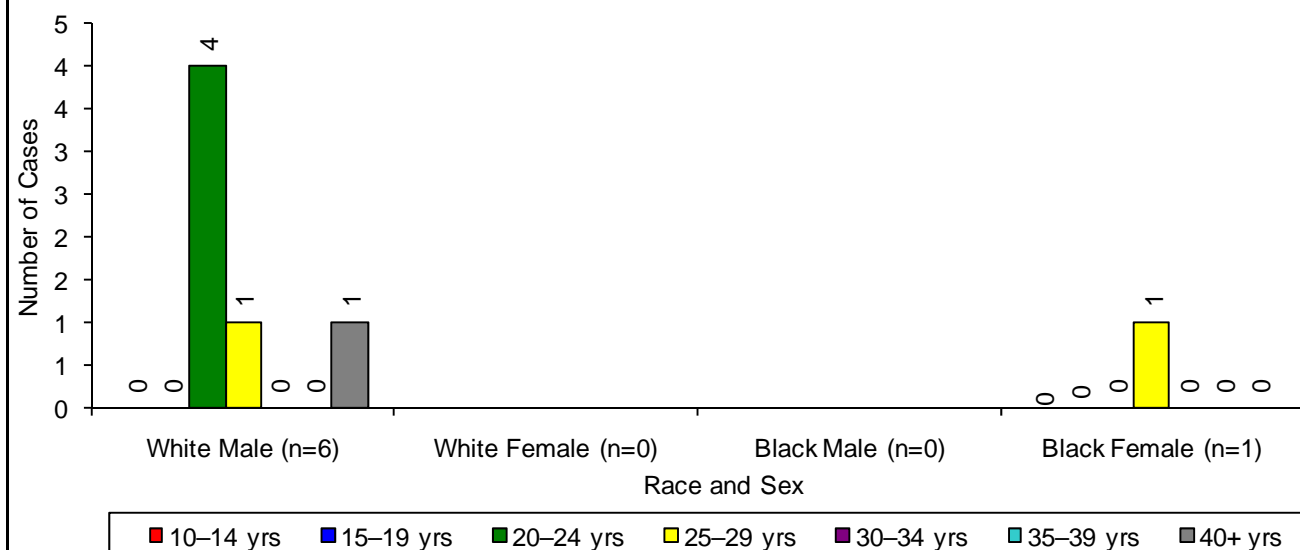
\*\*\*Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were a total of two new HIV disease diagnoses attributed to heterosexual contact in 2008 for the North Central HIV region (Table 13). There were 87 persons living with HIV disease attributed to heterosexual contact at the end of 2008 in the North Central HIV region. White females represented the largest proportion of both living HIV and AIDS cases among heterosexual contact cases.

At the end of 2008, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age for black males, black females, and white females (Table 14). Among white males, the majority were 45-64 years of age.

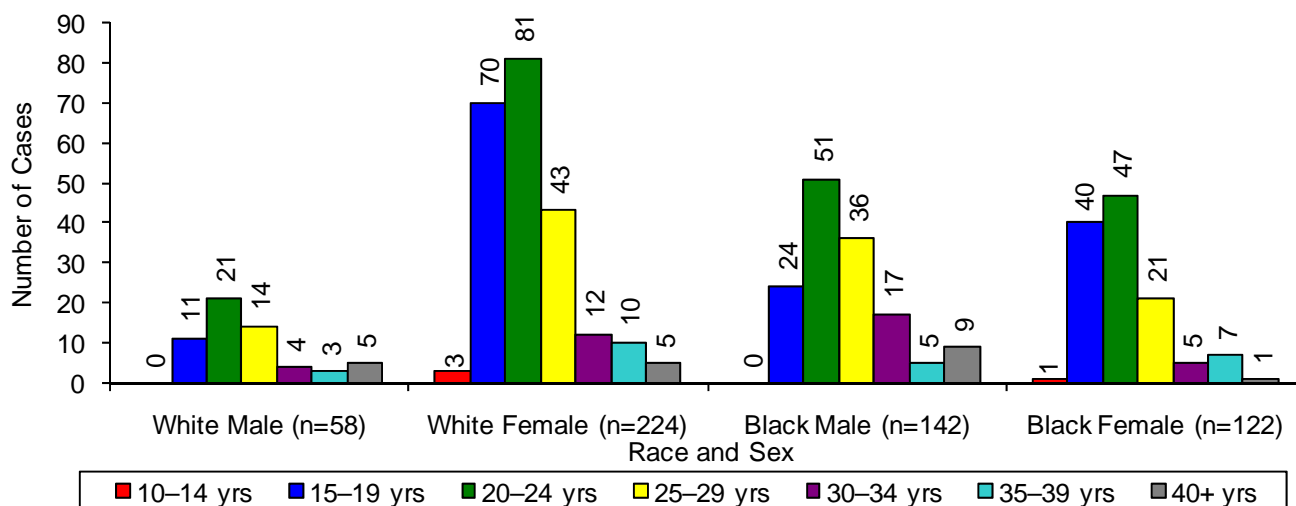
There were differences in the distribution of persons living with HIV disease by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In Boone County, black heterosexual contact cases comprised a larger proportion of persons living with HIV disease compared to other areas.

**Figure 7. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, North Central Region, 2008****Figure 8. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, North Central Region, 2008**

The largest number of P&S syphilis cases was reported among white males (8) (Figure 7). No cases of P&S syphilis were reported among females in the North Central HIV region in 2008. The number of reported cases increased from 2007 to 2008 among white males (2 to 8) and black males (0 to 2), and decreased among black females (1 to 0). A greater proportion of P&S syphilis cases in the North Central HIV region was reported among persons less than 40 years of age compared to Missouri overall.

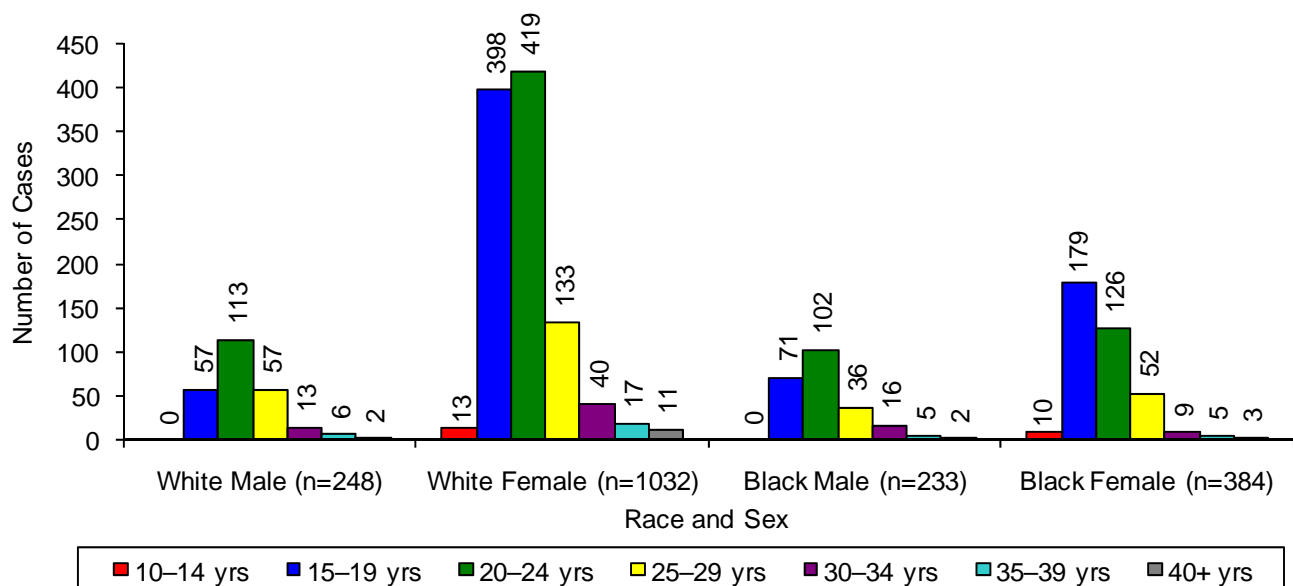
The largest number of early latent syphilis cases was reported among white males (6) (Figure 8). No early latent syphilis cases were reported among white females or black males. The number of reported early latent syphilis cases increased from 2007 to 2008 among white males (1 to 6) and black females (0 to 1), and decreased among black males (1 to 0). A greater proportion of early latent cases in the North Central HIV region was reported among individuals less than 40 years of age compared to Missouri overall.

**Figure 9. Reported gonorrhea cases, by race and sex, by age group at diagnosis, North Central Region, 2008**



Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

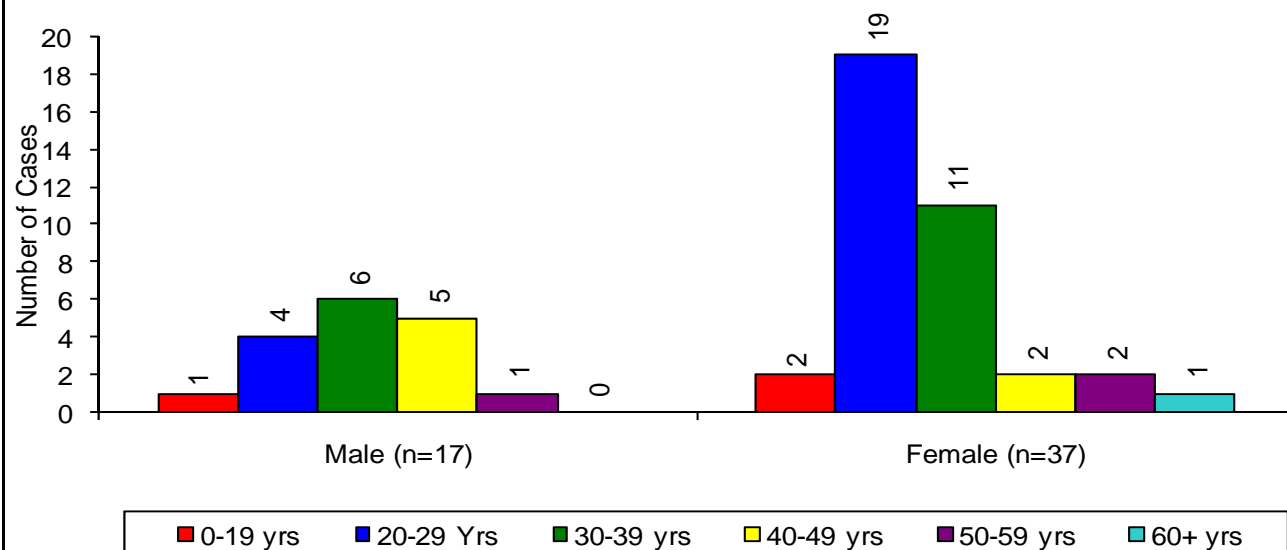
**Figure 10. Reported chlamydia cases, by race and sex, by age group at diagnosis, North Central Region, 2008**



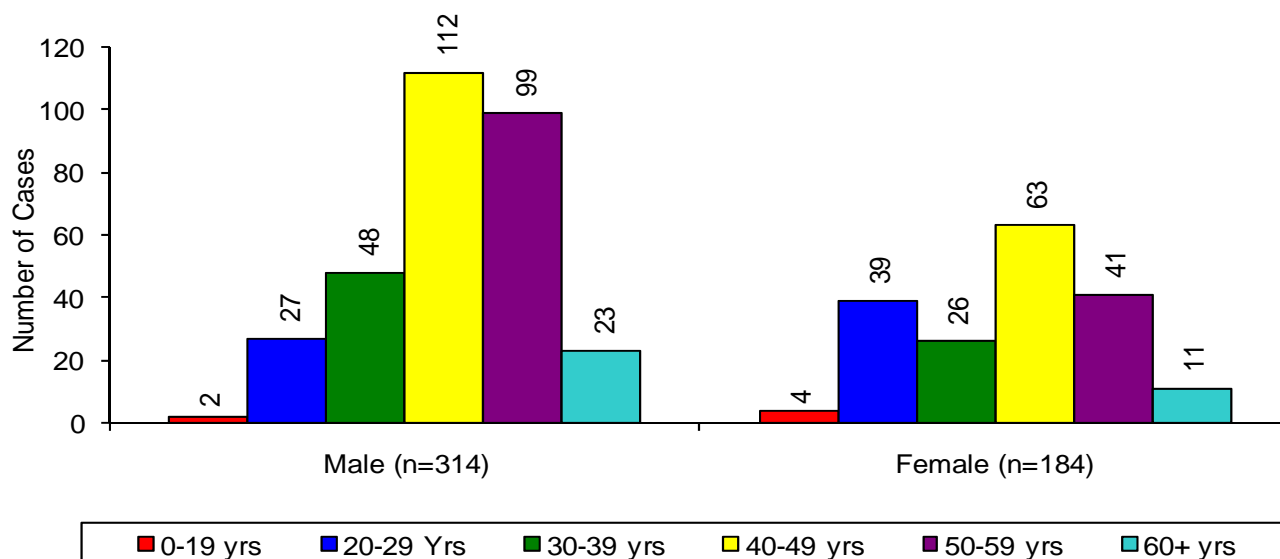
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among white females (224) followed by black males (142) (Figure 9). The number of reported cases decreased from 2007 to 2008 among all race/ethnicity and sex categories presented. Among all race/ethnicity and sex categories presented the largest number of reported cases was diagnosed between 20-24 years of age.

The largest number of chlamydia cases was reported among white females (1,032) followed by black females (384). The number of reported chlamydia cases decreased from 2007 to 2008 among white females (1,092 to 1,032), but increased among all other race/ethnicity and sex categories presented. Among black females, individuals 15-19 years of age represented the largest number of reported cases. Among all other race/ethnicity and sex categories presented the largest number of reported cases was diagnosed between 20-24 years of age.

**Figure 11. Reported Hepatitis B cases, by sex and by age group at diagnosis, North Central Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

**Figure 12. Reported Hepatitis C cases, by sex and by age group at diagnosis, North Central Region, 2008**

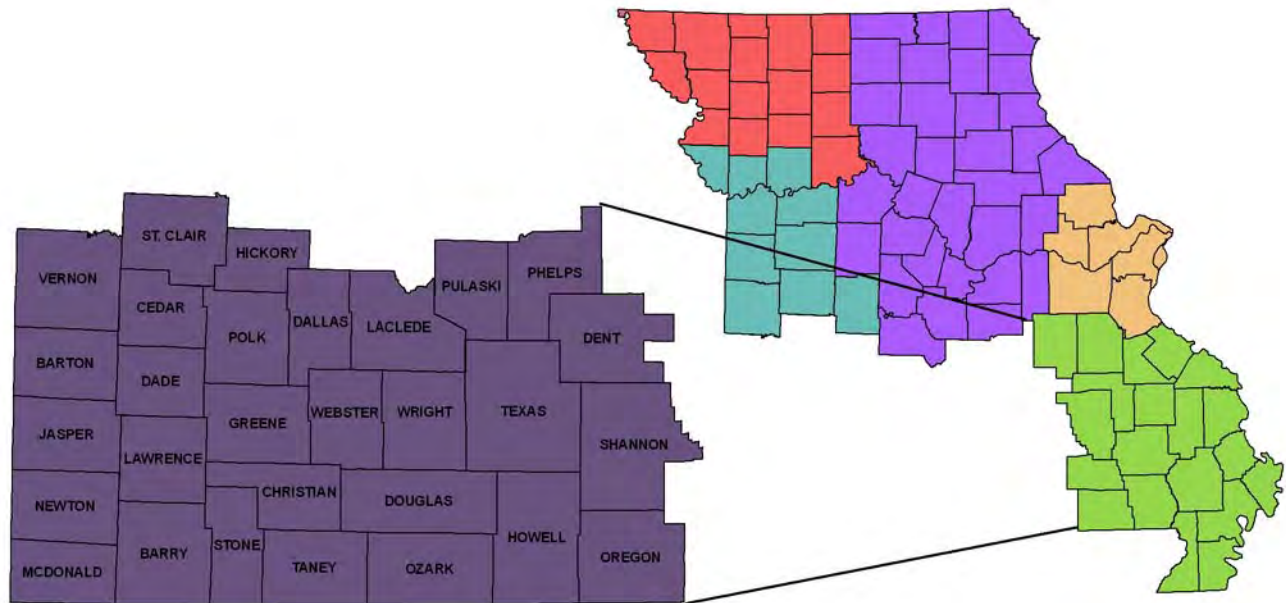
Note: Totals include persons whose age at diagnosis is unknown.

There were 54 reported cases of Hepatitis B in the North Central HIV region during 2008 (Figure 11). Females represented 68% of reported Hepatitis B cases, which was higher than the proportion of females among reported cases in Missouri overall (53%). There were differences in the age distribution of reported Hepatitis B cases by sex. Persons 30-39 years of age represented the largest proportion of male cases, and those 20-29 accounted for the largest proportion of female cases.

In 2008, there were 498 Hepatitis C cases reported in the North Central HIV region (Figure 12). Of the reported Hepatitis C cases, 63% were male. There were differences in the age distribution of reported Hepatitis C cases by sex. A greater proportion of females were diagnosed at less than 40 years of age (32%) compared to males (25%). However, among both males and females the largest numbers of cases were between 40-49 years of age.

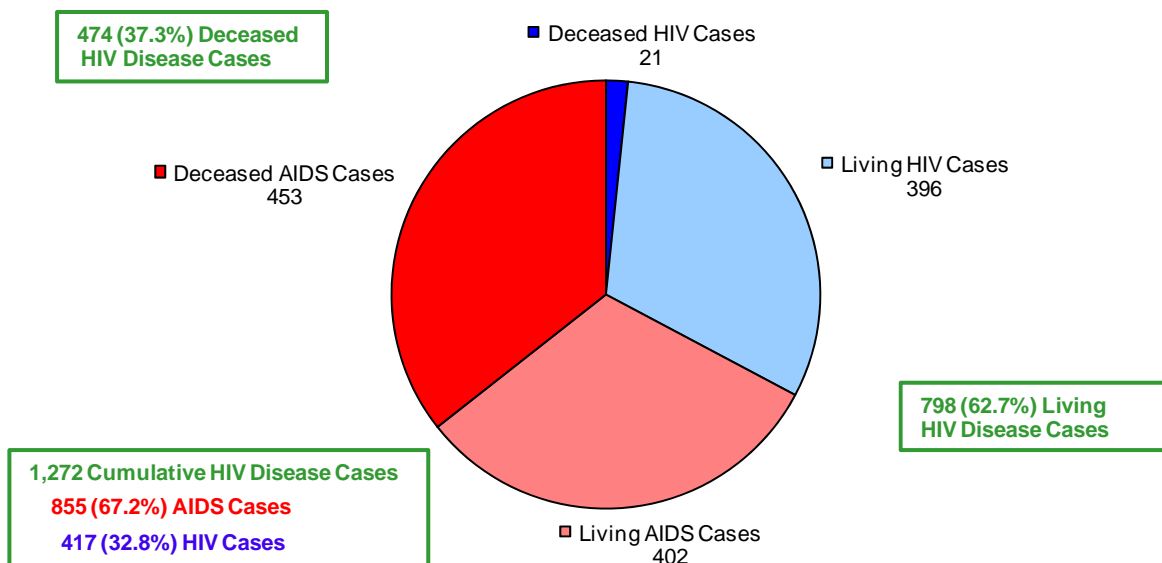
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# SOUTHWEST REGION

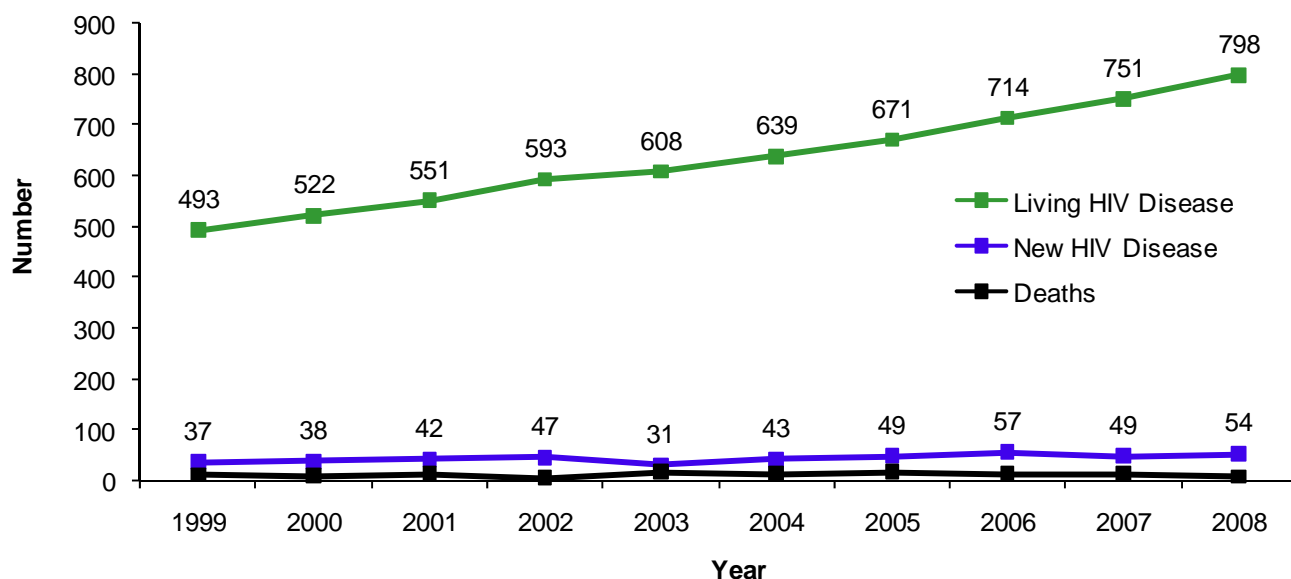


Population Estimates, Southwest HIV Region, 2007											
County	White		Black		Hispanic		American Indian		Asian		Total
Barry County	32,382	89.5%	138	0.4%	2,896	8.0%	374	1.0%	407	1.1%	36,197
Barton County	12,295	96.7%	70	0.6%	179	1.4%	128	1.0%	47	0.4%	12,719
Cedar County	13,244	96.5%	82	0.6%	219	1.6%	110	0.8%	74	0.5%	13,729
Christian County	69,815	95.6%	753	1.0%	1,687	2.3%	413	0.6%	398	0.5%	73,066
Dade County	7,278	96.7%	49	0.7%	100	1.3%	70	0.9%	26	0.3%	7,523
Dallas County	16,212	96.3%	106	0.6%	292	1.7%	162	1.0%	59	0.4%	16,831
Dent County	14,604	97.0%	77	0.5%	186	1.2%	144	1.0%	52	0.3%	15,063
Douglas County	13,006	97.2%	28	0.2%	137	1.0%	173	1.3%	33	0.2%	13,377
Greene County	243,285	92.2%	8,124	3.1%	6,703	2.5%	1,888	0.7%	3,980	1.5%	263,980
Hickory County	8,900	97.6%	29	0.3%	117	1.3%	65	0.7%	12	0.1%	9,123
Howell County	37,248	96.4%	212	0.5%	539	1.4%	451	1.2%	189	0.5%	38,639
Jasper County	103,698	90.0%	2,381	2.1%	6,438	5.6%	1,571	1.4%	1,152	1.0%	115,240
Laclede County	34,040	96.2%	352	1.0%	611	1.7%	204	0.6%	184	0.5%	35,391
Lawrence County	35,021	93.0%	211	0.6%	1,931	5.1%	325	0.9%	162	0.4%	37,650
Mcdonald County	18,741	81.9%	106	0.5%	3,059	13.4%	798	3.5%	191	0.8%	22,895
Newton County	51,365	91.7%	584	1.0%	1,858	3.3%	1,329	2.4%	902	1.6%	56,038
Oregon County	9,740	94.5%	35	0.3%	141	1.4%	361	3.5%	27	0.3%	10,304
Ozark County	9,018	97.5%	21	0.2%	109	1.2%	85	0.9%	12	0.1%	9,245
Phelps County	39,543	92.9%	994	2.3%	700	1.6%	363	0.9%	950	2.2%	42,550
Polk County	28,920	95.7%	287	0.9%	544	1.8%	228	0.8%	237	0.8%	30,216
Pulaski County	33,792	76.2%	5,328	12.0%	3,391	7.7%	495	1.1%	1,320	3.0%	44,326
Shannon County	8,074	95.8%	39	0.5%	108	1.3%	203	2.4%	7	0.1%	8,431
St. Clair County	9,118	96.7%	71	0.8%	122	1.3%	83	0.9%	34	0.4%	9,428
Stone County	30,507	96.7%	168	0.5%	544	1.7%	241	0.8%	92	0.3%	31,552
Taney County	42,885	93.8%	433	0.9%	1,623	3.5%	412	0.9%	368	0.8%	45,721
Texas County	22,461	96.3%	172	0.7%	306	1.3%	285	1.2%	97	0.4%	23,321
Vernon County	19,281	96.4%	210	1.1%	220	1.1%	183	0.9%	106	0.5%	20,000
Webster County	34,464	95.9%	506	1.4%	579	1.6%	251	0.7%	127	0.4%	35,927
Wright County	17,701	96.9%	123	0.7%	253	1.4%	160	0.9%	39	0.2%	18,276
Region Total	1,016,638	92.7%	21,689	2.0%	35,592	3.2%	11,555	1.1%	11,284	1.0%	1,096,758

**Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Southwest HIV Region, 1982—2008**



**Figure 2. Living and new HIV disease cases and deaths by year\*, Southwest HIV Region, 1999—2008**

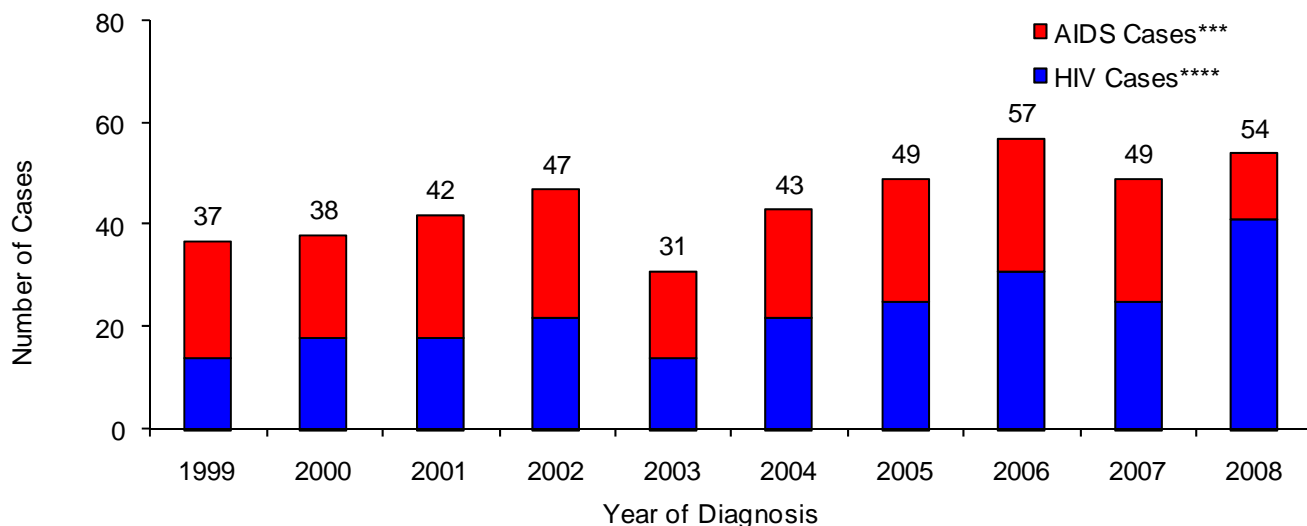


\*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year; For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2008, there have been a total of 1,272 HIV disease cases diagnosed in the Southwest HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 63% were still presumed to be living with HIV disease at the end of 2008. Among those living with HIV disease, 396 were classified as HIV cases at the end of 2008 and 402 were classified as AIDS cases.

At the end of 2008, there were 798 persons living with HIV disease whose most recent diagnosis occurred in the Southwest HIV region (Figure 2). The number of people living with HIV disease increased over time. There were 54 new HIV disease diagnoses in 2008. The number of deaths among persons with HIV disease remained generally stable.

**Figure 3. HIV disease cases, by current status\* and year of diagnosis\*\*, Southwest HIV Region, 1999—2008**



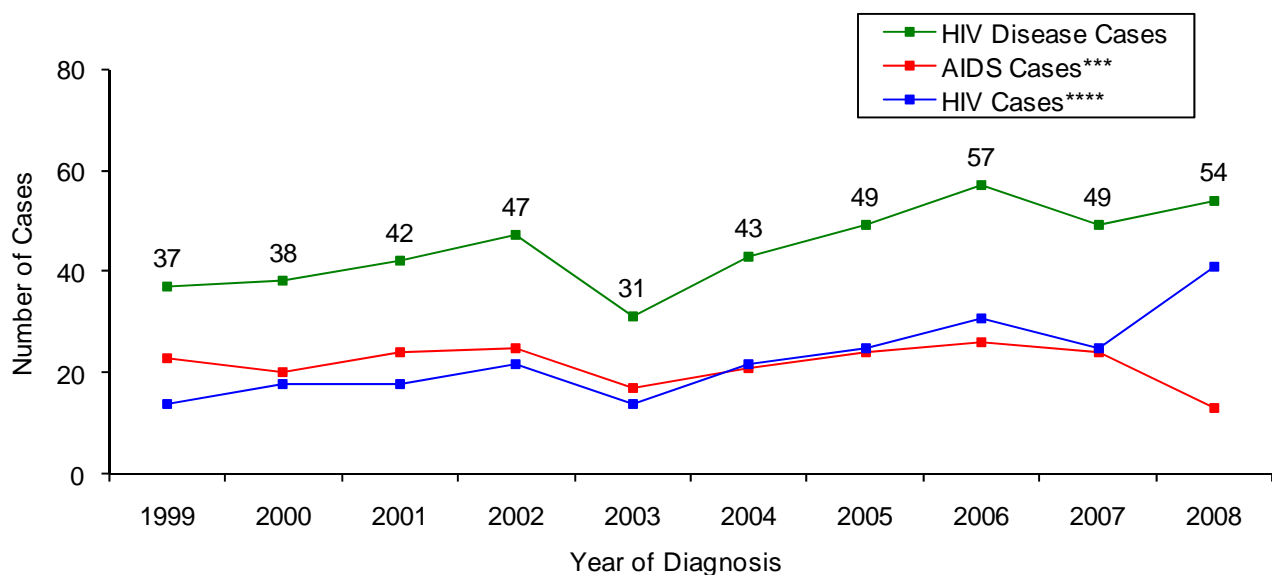
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

**Figure 4. Reported HIV disease cases, by current status\* and year of diagnosis\*\*, Southwest HIV Region, 1999—2008**



\*HIV case vs. AIDS case

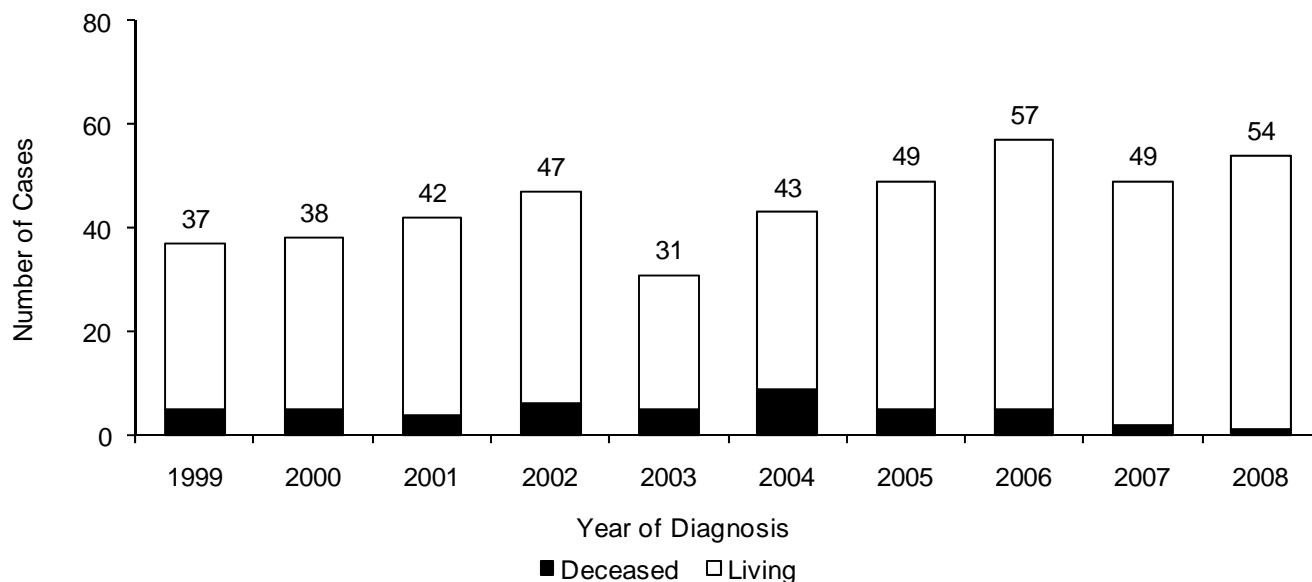
\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

The number of new diagnoses fluctuated from 1999 to 2008 in the Southwest HIV region. The median number of cases diagnosed from 2004 to 2008 was higher than the number diagnosed from 1999 to 2003. (Figures 3 and 4). It is difficult to determine if the increase was due to increased testing, a true increase in the number of infections, or other factors. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

**Figure 5. Persons diagnosed with HIV disease by current vital status\* and year of diagnosis\*\*, Southwest HIV Region, 1999—2008**



\*Vital status on December 31, 2008.

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

Of the 37 persons diagnosed with HIV disease in 1999, five (14%) were deceased by the end of 2008 (Figure 5). Among the 54 persons first diagnosed in 2008, one (2%) was deceased at the end of 2008. The difference in the proportion of cases that were deceased is due to the length of time individuals have been living with the disease.

**Table 1. Living<sup>†</sup> HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Southwest HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>
<b>Sex</b>									
Male	295	74.5%	54.7	350	87.1%	64.9	645	80.8%	119.7
Female	101	25.5%	18.1	52	12.9%	9.3	153	19.2%	27.4
Total	396	100.0%	36.1	402	100.0%	36.7	798	100.0%	72.8
<b>Race/Ethnicity</b>									
White	335	84.6%	33.0	340	84.6%	33.4	675	84.6%	66.4
Black	39	9.8%	179.8	45	11.2%	207.5	84	10.5%	387.3
Hispanic	14	3.5%	39.3	13	3.2%	36.5	27	3.4%	75.9
Asian	2	0.5%	17.7	1	0.2%	8.9	3	0.4%	26.6
American Indian	1	0.3%	8.7	3	0.7%	26.0	4	0.5%	34.6
Other/Unknown	5	1.3%	N/A	0	0.0%	N/A	5	0.6%	N/A
Total	396	100.0%	36.1	402	100.0%	36.7	798	100.0%	72.8
<b>Race/Ethnicity-Males</b>									
White Male	256	86.8%	51.5	304	86.9%	61.2	560	86.8%	112.7
Black Male	24	8.1%	201.4	33	9.4%	277.0	57	8.8%	478.4
Hispanic Male	8	2.7%	42.4	10	2.9%	53.0	18	2.8%	95.4
Asian Male	2	0.7%	36.1	0	0.0%	0.0	2	0.3%	36.1
American Indian Male	1	0.3%	17.2	3	0.9%	51.5	4	0.6%	68.7
Other/Unknown Male	4	1.4%	N/A	0	0.0%	N/A	4	0.6%	N/A
Total	295	100.0%	54.7	350	100.0%	64.9	645	100.0%	119.7
<b>Race/Ethnicity-Females</b>									
White Female	79	78.2%	15.2	36	69.2%	6.9	115	75.2%	22.1
Black Female	15	14.9%	153.5	12	23.1%	122.8	27	17.6%	276.2
Hispanic Female	6	5.9%	35.9	3	5.8%	17.9	9	5.9%	53.8
Asian Female	0	0.0%	0.0	1	1.9%	17.4	1	0.7%	17.4
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	1	1.0%	N/A	0	0.0%	N/A	1	0.7%	N/A
Total	101	100.0%	18.1	52	100.0%	9.3	153	100.0%	27.4
<b>Current Age<sup>‡</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	4	1.0%	2.5	0	0.0%	0.0	4	0.5%	2.5
13-18	8	2.0%	8.9	1	0.2%	1.1	9	1.1%	10.0
19-24	14	3.5%	14.8	7	1.7%	7.4	21	2.6%	22.2
25-44	215	54.3%	72.7	166	41.3%	56.1	381	47.7%	128.8
45-64	148	37.4%	55.3	208	51.7%	77.7	356	44.6%	132.9
65+	7	1.8%	4.4	20	5.0%	12.5	27	3.4%	16.8
Total	396	100.0%	36.1	402	100.0%	36.7	798	100.0%	72.8

<sup>†</sup>Includes persons diagnosed with HIV disease in the Southwest HIV Region who are currently living, regardless of current residence.

\*Cases which remained HIV cases at the end of 2008.

\*\*Cases classified as AIDS by December 31, 2008.

\*\*\*The sum of HIV cases and AIDS cases.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

<sup>‡</sup>Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

**Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Southwest HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>
<b>Sex</b>									
Male	32	78.0%	5.9	11	84.6%	2.0	43	79.6%	8.0
Female	9	22.0%	1.6	2	15.4%	0.4	11	20.4%	2.0
Total	41	100.0%	3.7	13	100.0%	1.2	54	100.0%	4.9
<b>Race/Ethnicity</b>									
White	28	68.3%	2.8	10	76.9%	1.0	38	70.4%	3.7
Black	8	19.5%	36.9	3	23.1%	13.8	11	20.4%	50.7
Hispanic	3	7.3%	8.4	0	0.0%	0.0	3	5.6%	8.4
Asian	1	2.4%	8.9	0	0.0%	0.0	1	1.9%	8.9
American Indian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown	1	2.4%	N/A	0	0.0%	N/A	1	1.9%	N/A
Total	41	100.0%	3.7	13	100.0%	1.2	54	100.0%	4.9
<b>Race/Ethnicity-Males</b>									
White Male	22	68.8%	4.4	9	81.8%	1.8	31	72.1%	6.2
Black Male	6	18.8%	50.4	2	18.2%	16.8	8	18.6%	67.1
Hispanic Male	3	9.4%	15.9	0	0.0%	0.0	3	7.0%	15.9
Asian Male	1	3.1%	18.1	0	0.0%	0.0	1	2.3%	18.1
American Indian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Male	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	32	100.0%	5.9	11	100.0%	2.0	43	100.0%	8.0
<b>Race/Ethnicity-Females</b>									
White Female	6	66.7%	1.2	1	50.0%	0.2	7	63.6%	1.3
Black Female	2	22.2%	20.5	1	50.0%	10.2	3	27.3%	30.7
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	1	11.1%	N/A	0	0.0%	N/A	1	9.1%	N/A
Total	9	100.0%	1.6	2	100.0%	0.4	11	100.0%	2.0
<b>Current Age<sup>†</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	2	4.9%	2.2	0	0.0%	0.0	2	3.7%	2.2
19-24	7	17.1%	7.4	2	15.4%	2.1	9	16.7%	9.5
25-44	25	61.0%	8.5	8	61.5%	2.7	33	61.1%	11.2
45-64	7	17.1%	2.6	3	23.1%	1.1	10	18.5%	3.7
65+	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	41	100.0%	3.7	13	100.0%	1.2	54	100.0%	4.9

\*HIV cases diagnosed during 2008 which remained HIV cases at the end of the year.

\*\*AIDS cases initially diagnosed in 2008.

\*\*\*The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2008 with HIV, which progressed to AIDS in 2008.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

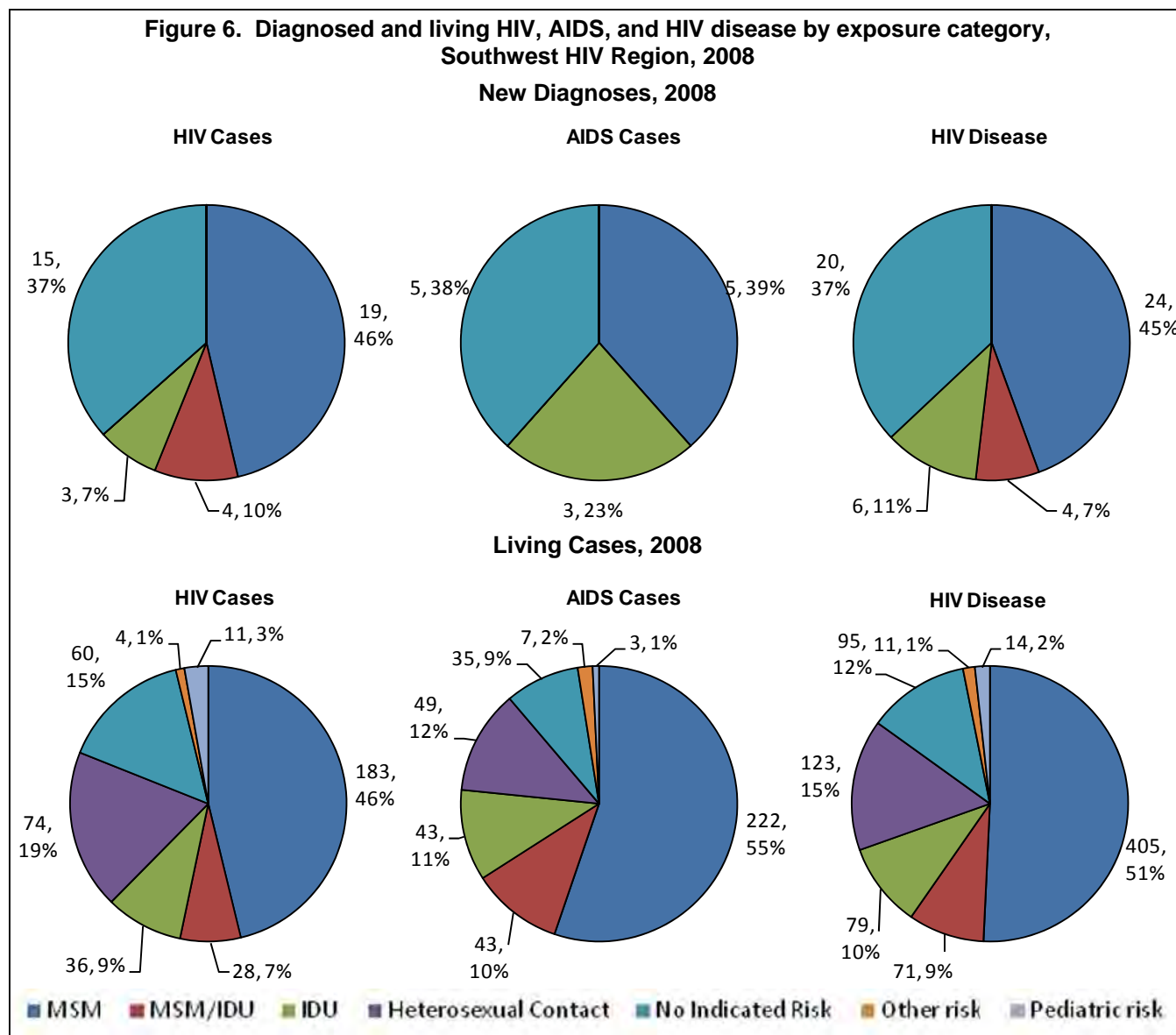
†Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

## Epi Profiles Summary: Southwest HIV Region

Of the 798 persons living with HIV at the end of 2008, 81% were males (Table 1). The rate of those living with HIV disease was 4.4 times greater among males than females. Although whites represented the largest proportion of persons living with HIV disease (85%), the rate of those living with HIV disease was 5.8 times greater among blacks than whites. The rate was 1.1 times greater among Hispanics than whites. Among males, the rate of persons living with HIV disease was 4.2 times greater for blacks than whites, but the rate was lower for Hispanics compared to whites. Among females, the rate of those living with HIV disease was 12.5 times greater among blacks than whites, and 2.4 times greater for Hispanics than whites. The difference in the rates between Hispanic and white females should be interpreted with some caution due to the small number of Hispanic females living with HIV disease.

Of the 54 persons newly diagnosed with HIV disease in 2008, 24% were classified as AIDS cases by the end of 2008 (Table 2). Females represented a greater proportion of new diagnoses classified as HIV cases (22%) compared to the proportion they represented among new AIDS cases (15%). Whites represented the majority of new HIV disease diagnoses (70%).



Among all categories, the largest proportion of cases was attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

**Table 3. New and living HIV and AIDS cases and rates, by geographic area, Southwest HIV Region, 2008**

Geographic Area	HIV cases						AIDS cases					
	Diagnosed 2008*			Living			Diagnosed 2008**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Greene County	24	58.5%	9.1	173	43.7%	65.5	4	30.8%	1.5	171	42.5%	64.8
Jasper County	6	14.6%	5.2	51	12.9%	44.3	5	38.5%	4.3	57	14.2%	49.5
Pulaski County	1	2.4%	2.3	14	3.5%	31.6	0	0.0%	0.0	14	3.5%	31.6
Christian County	2	4.9%	2.7	24	6.1%	32.8	0	0.0%	0.0	12	3.0%	16.4
Taney County	1	2.4%	2.2	19	4.8%	41.6	0	0.0%	0.0	15	3.7%	32.8
Remainder of Region	7	17.1%	1.3	115	29.0%	20.7	4	30.8%	0.7	133	33.1%	24.0
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>41</b>	<b>100.0%</b>	<b>3.7</b>	<b>396</b>	<b>100.0%</b>	<b>36.1</b>	<b>13</b>	<b>100.0%</b>	<b>1.2</b>	<b>402</b>	<b>100.0%</b>	<b>36.7</b>

\*HIV cases diagnosed and reported to the Department during 2008 which remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

Note: Percentages may not total due to rounding.

The largest number of new HIV cases was diagnosed in Greene County (24), while the largest number of new AIDS cases was diagnosed in Jasper County (5) (Table 3). The highest rates of persons living with HIV and AIDS were observed among persons diagnosed in Greene County.

**Table 4. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Southwest HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	13	68.4%	163	89.1%	4	80.0%	203	91.4%
Black	2	10.5%	8	4.4%	1	20.0%	14	6.3%
Hispanic	3	15.8%	8	4.4%	0	0.0%	3	1.4%
Other/Unknown	1	5.3%	4	2.2%	0	0.0%	2	0.9%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>19</b>	<b>100.0%</b>	<b>183</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>222</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Southwest HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	1	4.5%	0	0.0%	2	0.5%
19-24	4	1.1%	1	4.5%	1	9.1%	6	1.5%
25-44	178	48.6%	12	54.5%	5	45.5%	197	48.6%
45-64	171	46.7%	8	36.4%	5	45.5%	186	45.9%
65+	13	3.6%	0	0.0%	0	0.0%	14	3.5%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>366</b>	<b>100.0%</b>	<b>22</b>	<b>100.0%</b>	<b>11</b>	<b>100.0%</b>	<b>405</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 6. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by geographic area, Southwest HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Greene County	183	92.0%	9	4.5%	4	2.0%	199	49.1%
Jasper County	50	90.9%	3	5.5%	1	1.8%	55	13.6%
Christian County	16	100.0%	0	0.0%	0	0.0%	16	4.0%
Remaining Counties	117	86.7%	10	7.4%	6	4.4%	135	33.3%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>366</b>	<b>90.4%</b>	<b>22</b>	<b>5.4%</b>	<b>11</b>	<b>2.7%</b>	<b>405</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race in each area.

\*\*\*Percentage of cases per area.

Note: Percentages may not total due to rounding.

There were 24 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2008 for the Southwest HIV region (Table 4). Seventy-nine percent of new diagnoses remained sub-classified as HIV cases at the end of 2008. Whites represented the greatest proportion of new HIV and AIDS case diagnoses. There were 405 living HIV disease cases attributed to MSM in the Southwest HIV region. Whites represented a slightly greater proportion among living AIDS cases compared to their proportion among living HIV cases.

The greatest proportions of living cases attributed to MSM were between 25-44 (49%) and 45-64 years old (46%) at the end of 2008, (Table 5). A greater proportion of blacks (55%) were between 25-44 years old compared to the proportion of whites (49%).

Greene County residents accounted for the largest number of MSM living with HIV in the Southwest HIV region (Table 6). There were no differences in the distribution of living cases by race/ethnicity among the geographic areas.

**Table 7. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Southwest HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	4	100.0%	27	96.4%	0	--	36	83.7%
Black	0	0.0%	0	0.0%	0	--	5	11.6%
Hispanic	0	0.0%	0	0.0%	0	--	2	4.7%
Other/Unknown	0	0.0%	1	3.6%	0	--	0	0.0%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>4</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>43</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Southwest HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	1.6%	0	0.0%	0	0.0%	1	1.4%
25-44	25	39.7%	4	80.0%	2	100.0%	32	45.1%
45-64	36	57.1%	1	20.0%	0	0.0%	37	52.1%
65+	1	1.6%	0	0.0%	0	0.0%	1	1.4%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>63</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>71</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, Southwest HIV Region, 2008**

Geographic Area	Cases	%
Greene County	34	47.9%
Jasper County	10	14.1%
Taney County	3	4.2%
Remaining Counties	24	33.8%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>71</b>	<b>100.0%</b>

There was a total of four new HIV disease diagnoses attributed to men who have sex with men and inject drugs (MSM/IDU) in 2008 for the Southwest HIV region (Table 7). All new diagnoses remained sub-classified as HIV cases at the end of 2008. There were 71 MSM/IDU living with HIV disease at the end of 2008 whose most recent diagnosis occurred in the Southwest HIV region. Whites comprised a greater proportion of those living with HIV (96%) compared to the proportion of those living with AIDS (84%).

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM/IDU (Table 8). Among whites, more living cases were 45-64 years of age at the end of 2008. Among blacks and Hispanics the largest numbers of living cases were 25-44 years of age.

Greene County (48%) residents accounted for the largest number of MSM/IDU living with HIV in the Southwest HIV region (Table 9).

**Table 10. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Southwest HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	0.0%	14	38.9%	2	66.7%	25	58.1%
Black Male	0	0.0%	1	2.8%	0	0.0%	3	7.0%
Hispanic Male	0	0.0%	0	0.0%	0	0.0%	1	2.3%
White Female	3	100.0%	19	52.8%	1	33.3%	9	20.9%
Black Female	0	0.0%	1	2.8%	0	0.0%	3	7.0%
Hispanic Female	0	0.0%	0	0.0%	0	0.0%	2	4.7%
<b>SOUTHWEST HIV REGION TOTAL<sup>†</sup></b>	<b>3</b>	<b>100.0%</b>	<b>36</b>	<b>100.0%</b>	<b>3</b>	<b>100.0%</b>	<b>43</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 11. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, Southwest HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	2.6%	0	0.0%	3	10.7%	0	0.0%	5	6.3%
25-44	14	35.9%	1	25.0%	14	50.0%	3	75.0%	34	43.0%
45-64	23	59.0%	3	75.0%	11	39.3%	1	25.0%	39	49.4%
65+	1	2.6%	0	0.0%	0	0.0%	0	0.0%	1	1.3%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>39</b>	<b>100.0%</b>	<b>4</b>	<b>100.0%</b>	<b>28</b>	<b>100.0%</b>	<b>4</b>	<b>100.0%</b>	<b>79</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 12. Living HIV disease cases in injecting drug users, by geographic area, Southwest HIV Region, 2008**

Geographic Area	Cases	%
Greene County	28	35.4%
Jasper County	9	11.4%
Remaining Counties	42	53.2%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>79</b>	<b>100.0%</b>

There were six new HIV disease diagnoses attributed to injecting drug users (IDU) in 2008 for the Southwest HIV region (Table 10). Of the new diagnoses, 50% progressed to AIDS by the end of 2008. There were 79 living HIV disease cases attributed to IDU at the end of 2008 in the Southwest HIV region. Of the living HIV disease cases, 54% were classified as AIDS at the end of 2008. White males represented the largest proportion of living AIDS cases (58%), while white females comprised the largest proportion of living HIV cases (53%).

Overall, persons 45-64 years of age represented the largest number (39) of living HIV disease cases among IDU in the Southwest HIV region (Table 11). However there were differences in the distribution of current age by sex. Among females, more cases were between 25-44 years of age at the end of 2008, while more cases were 45-64 years of age among males.

Greene County had the largest number of living HIV disease cases attributed to IDU in 2008 (Table 12).

**Table 13. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Southwest HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	0	--	12	16.2%	0	--	13	26.5%
Black Male	0	--	6	8.1%	0	--	4	8.2%
Hispanic Male	0	--	0	0.0%	0	--	0	0.0%
White Female	0	--	45	60.8%	0	--	24	49.0%
Black Female	0	--	9	12.2%	0	--	6	12.2%
Hispanic Female	0	--	2	2.7%	0	--	0	0.0%
<b>SOUTHWEST HIV REGION TOTAL<sup>†</sup></b>	<b>0</b>	<b>--</b>	<b>74</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>49</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Southwest HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	1.4%	0	0.0%	2	1.6%
25-44	5	20.0%	3	30.0%	41	59.4%	12	80.0%	63	51.2%
45-64	17	68.0%	7	70.0%	26	37.7%	3	20.0%	54	43.9%
65+	3	12.0%	0	0.0%	1	1.4%	0	0.0%	4	3.3%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>25</b>	<b>100.0%</b>	<b>10</b>	<b>100.0%</b>	<b>69</b>	<b>100.0%</b>	<b>15</b>	<b>100.0%</b>	<b>123</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, Southwest HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Greene County	19	55.9%	14	41.2%	0	0.0%	34	27.6%
Jasper County	14	87.5%	1	6.3%	1	6.3%	16	13.0%
Pulaski County	1	14.3%	6	85.7%	0	0.0%	7	5.7%
Remaining Counties	60	90.9%	4	6.1%	1	1.5%	66	53.7%
<b>SOUTHWEST HIV REGION TOTAL</b>	<b>94</b>	<b>76.4%</b>	<b>25</b>	<b>20.3%</b>	<b>2</b>	<b>1.6%</b>	<b>123</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race in each area.

\*\*\*Percentage of cases per area.

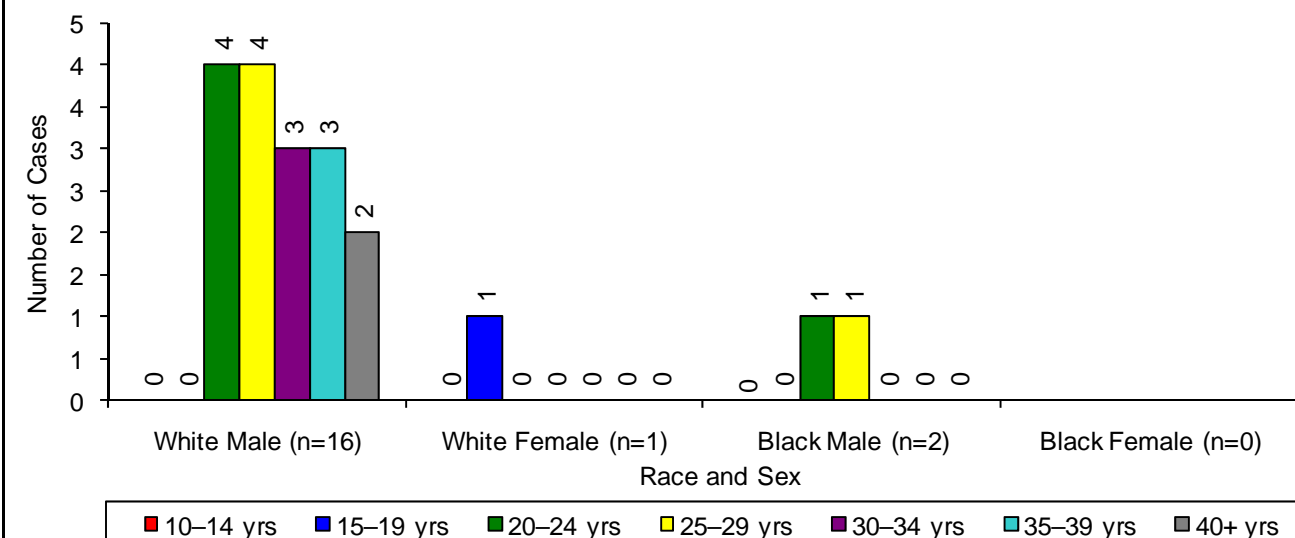
Note: Percentages may not total due to rounding.

There were no new HIV disease diagnoses attributed to heterosexual contact in 2008 for the Southwest HIV region (Table 13). There were 123 living HIV disease cases attributed to heterosexual contact at the end of 2008 in the Southwest HIV region. White females represented the largest proportion of both living HIV (61%) and AIDS (49%) cases.

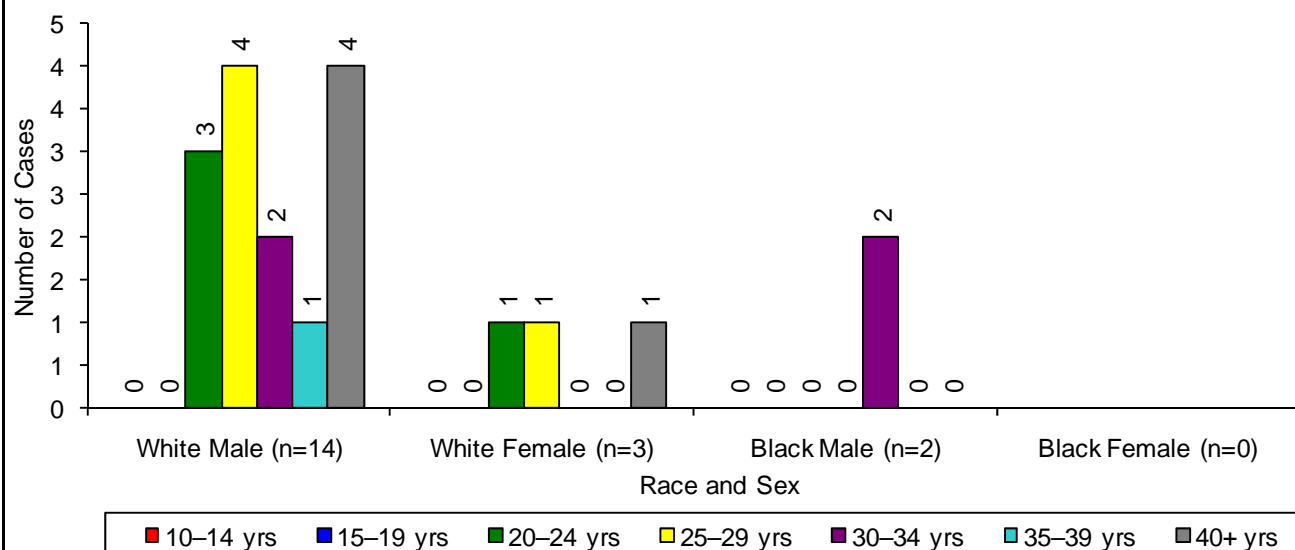
At the end of 2008, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age for white females (59%) and black females (80%) (Table 14). Among white and black males, the majority were 45-64 years of age.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In Pulaski County and Greene County, blacks comprised a larger proportion of living cases, 86% and 41% respectively, compared to other areas.

**Figure 7. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Southwest Region, 2008**

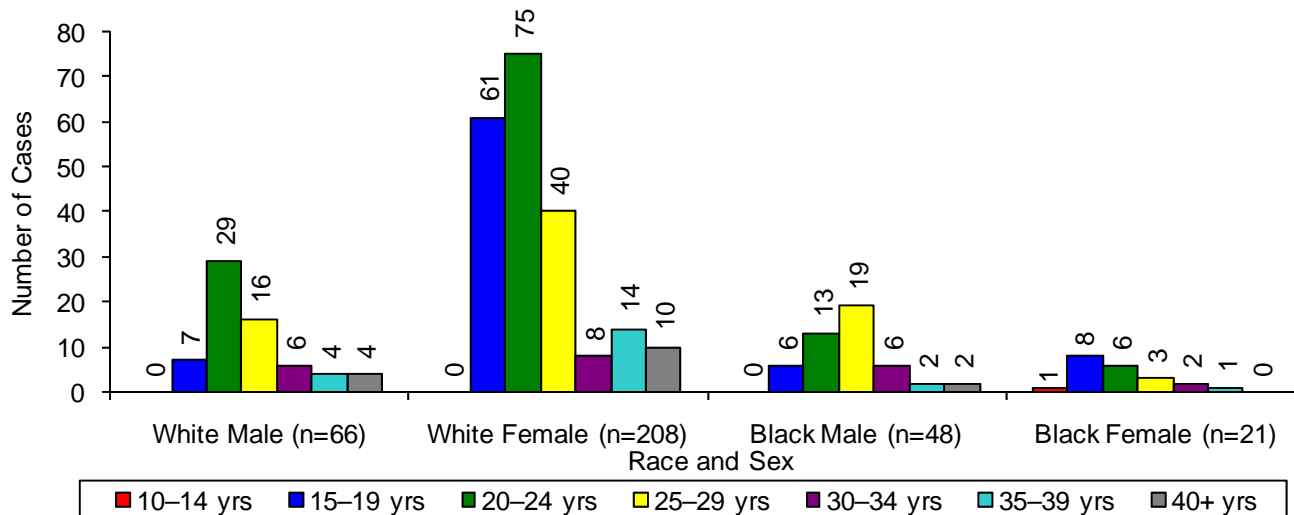


**Figure 8. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Southwest Region, 2008**

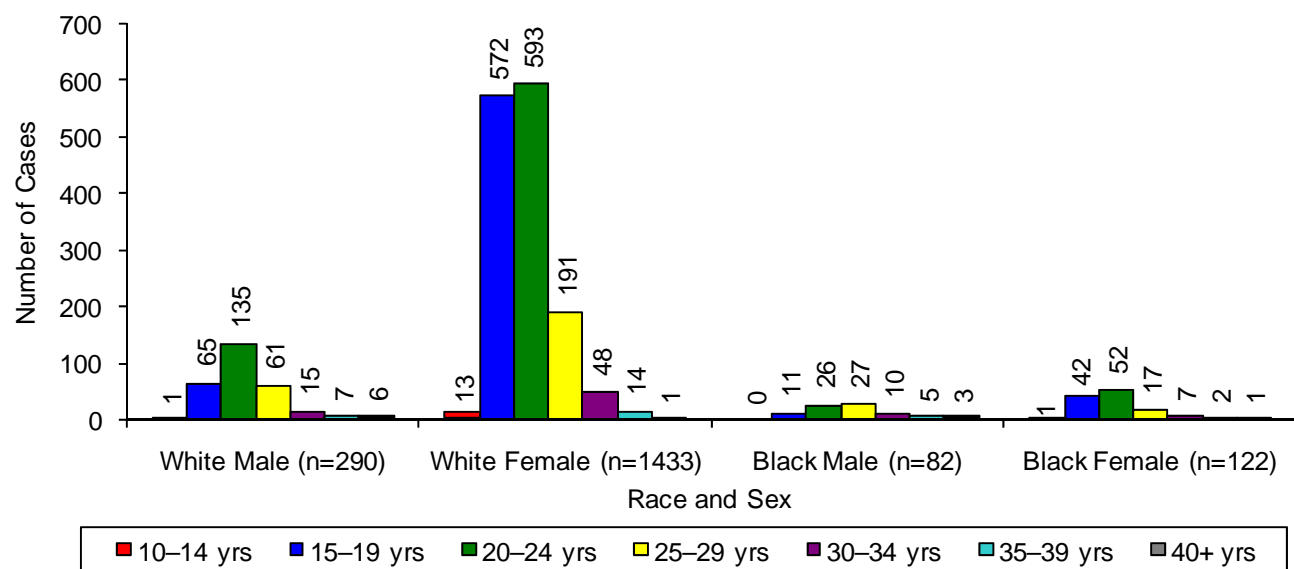


The largest number of P&S syphilis cases was reported among white males (16) (Figure 7). No cases of P&S syphilis were reported among black females in the Southwest HIV region in 2008. The number of reported cases increased from 2007 to 2008 among white males (12 to 16), black males (1 to 2), and white females (0 to 1). Persons less than 40 years of age represented a greater proportion of P&S syphilis cases in the Southwest HIV region compared to Missouri overall.

The largest number of early latent syphilis cases was reported among white males (14) (Figure 8). No early latent syphilis cases were reported among black females. The number of reported early latent syphilis cases increased from 2007 to 2008 among white males (10 to 14), white females (1 to 3), and black males (0 to 2). Among white males, the largest number of cases were reported among individuals 25-29 and persons 40 or more years of age.

**Figure 9. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Southwest Region, 2008**

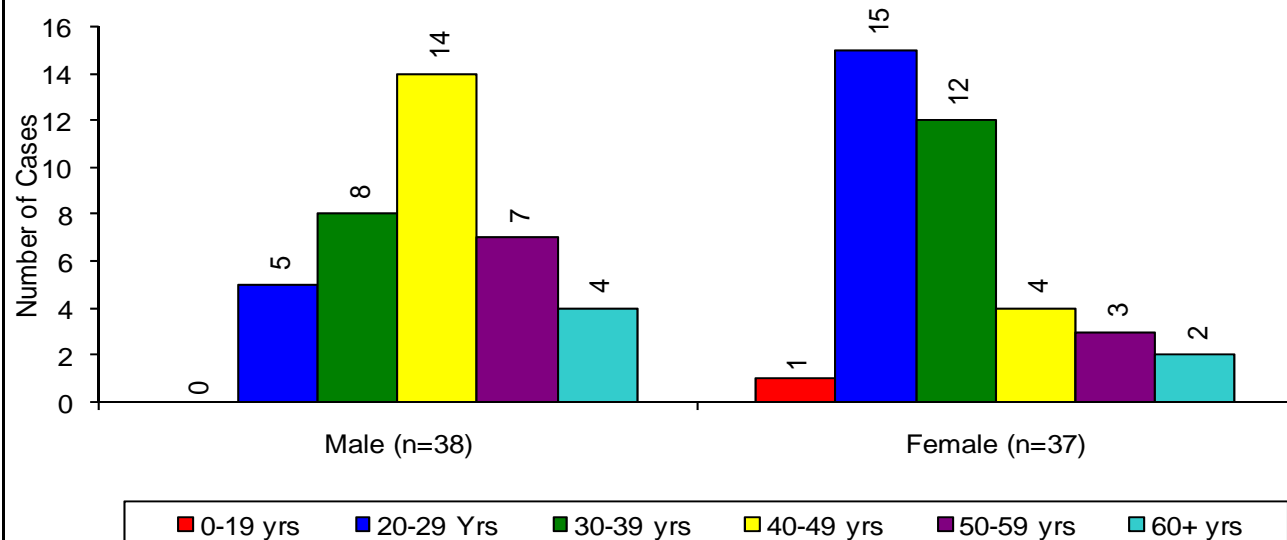
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

**Figure 10. Reported chlamydia cases, by race and sex, by age group at diagnosis, Southwest Region, 2008**

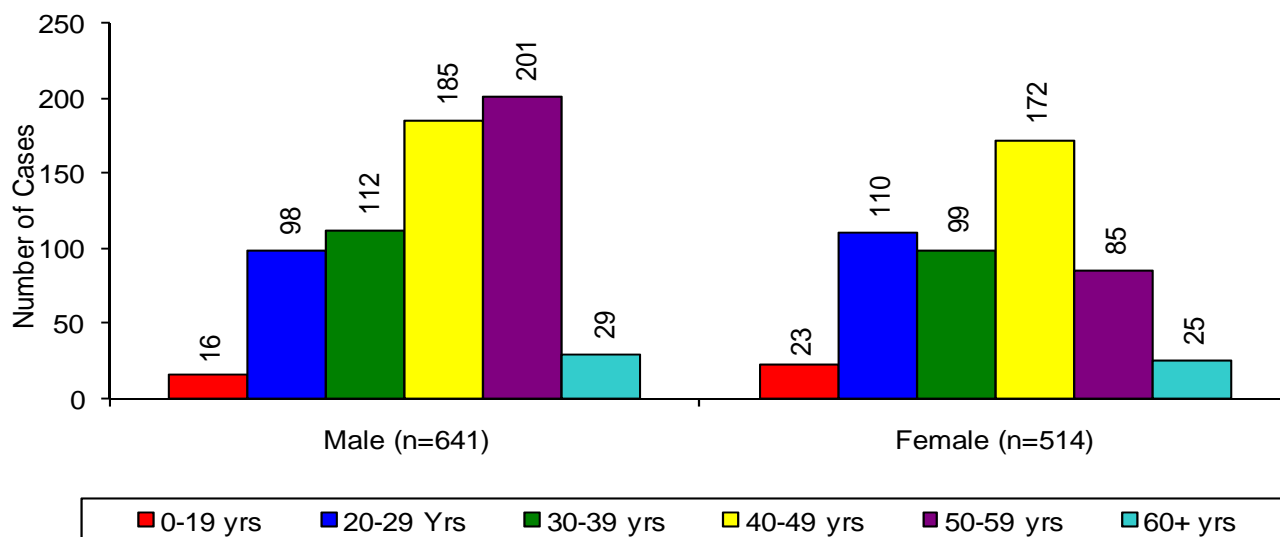
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest totals of gonorrhea cases were reported among white females (208) and black males (48) in the Southwest HIV region (Figure 9). The number of reported cases decreased from 2007 to 2008 among all race/ethnicity and sex categories presented. Among white males and females, the greatest numbers of cases were diagnosed between 20-24 years of age. Among black males, the largest number of cases was seen in persons between 25-29 years of age. Among black females the largest number of cases was reported in those between 15-19 years of age.

The largest numbers of chlamydia cases were reported among white females (1,433) and white males (290). The number of reported chlamydia cases increased from 2007 to 2008 among white females (1,431 to 1,433) and black females (115 to 122), but decreased among white males (309 to 290) and black males (88 to 82). Individuals 20-24 years of age represented the largest number of reported cases among white males, white females, and black females. Among black males a nearly equal number of cases were diagnosed between 20-24 and 25-29 years of age.

**Figure 11. Reported Hepatitis B cases, by sex and by age group at diagnosis, Southwest Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

**Figure 12. Reported Hepatitis C cases, by sex and by age group at diagnosis, Southwest Region, 2008**

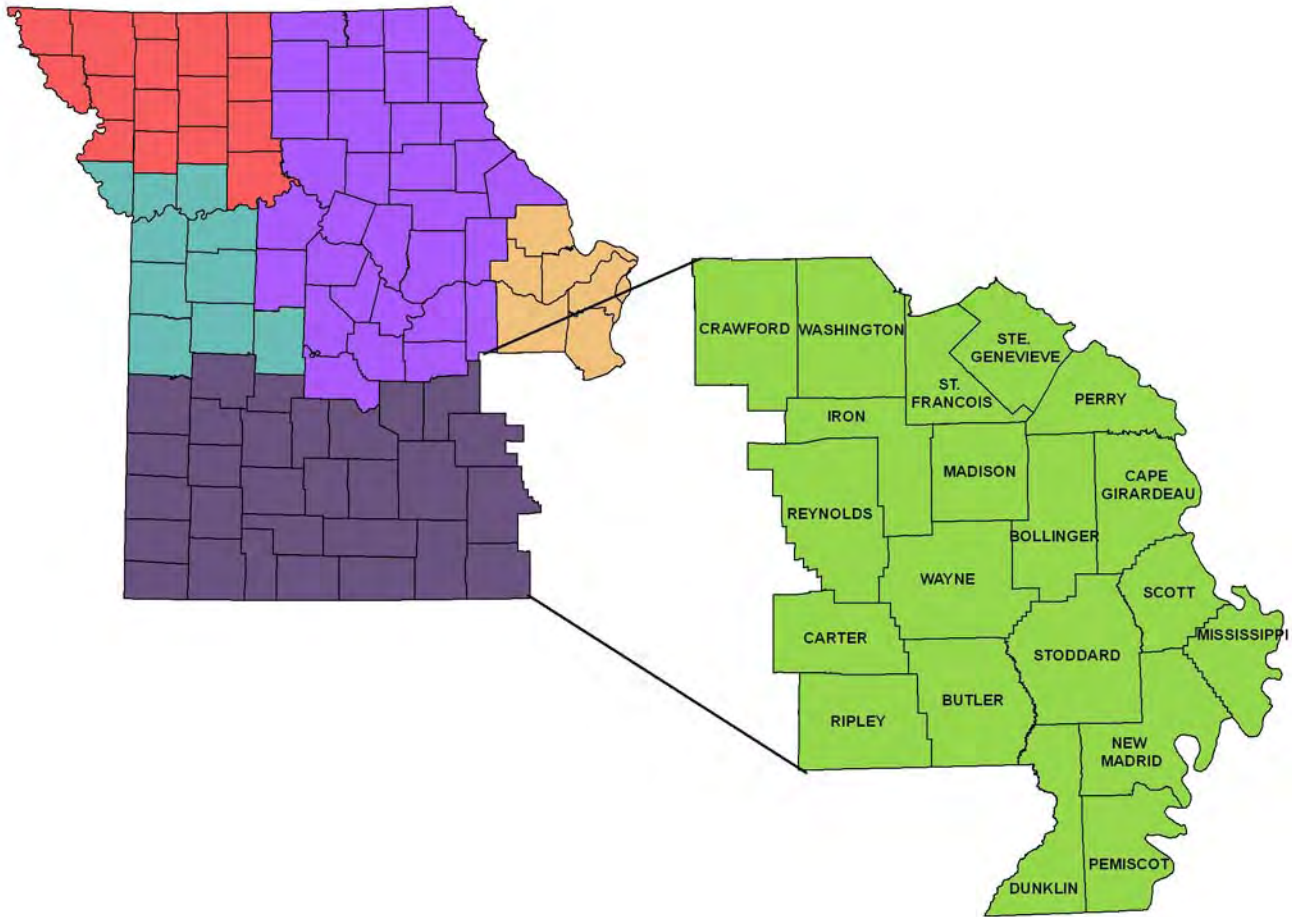
Note: Totals include persons whose age at diagnosis is unknown.

There were 75 reported cases of Hepatitis B in the Southwest HIV region during 2008 (Figure 11). Females represented 49% of reported Hepatitis B cases. There were differences in the age distribution of reported Hepatitis B cases by sex. Those 40-49 and 20-29 years of age represented the largest proportions of cases among males and females, respectively.

In 2008, there were 1,156 Hepatitis C cases reported in the Southwest HIV region, including one person for whom sex was not known (Figure 13). Of the reported Hepatitis C cases, 55% were male. There were differences in the age at diagnosis of reported Hepatitis C cases by sex. Among males, the largest numbers of cases were reported among persons 50-59 years of age, and persons 40-49 years of age. The largest number of cases among females occurred in those 40-49 years of age.

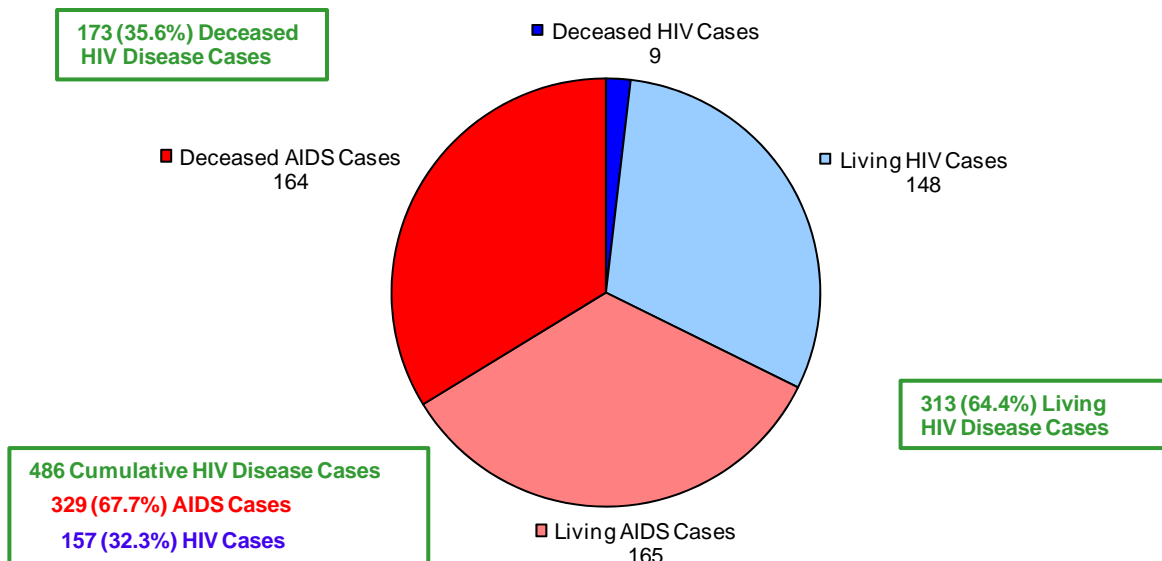
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# SOUTHEAST REGION

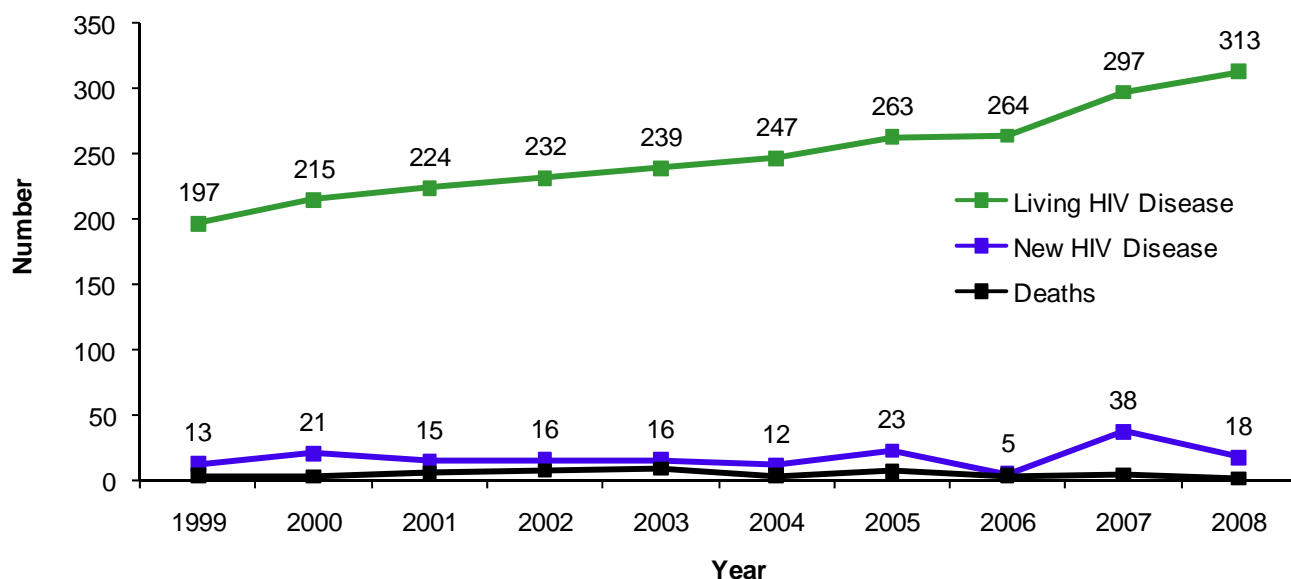


Population Estimates, Southeast HIV Region, 2007											
County	White		Black		Hispanic		American Indian		Asian		Total
Bollinger County	11,846	97.8%	44	0.4%	97	0.8%	101	0.8%	30	0.2%	12,118
Butler County	37,887	91.7%	2,311	5.6%	509	1.2%	267	0.6%	352	0.9%	41,326
Cape Girardeau County	66,085	90.9%	4,575	6.3%	941	1.3%	322	0.4%	817	1.1%	72,740
Carter County	5,727	96.6%	9	0.2%	78	1.3%	103	1.7%	12	0.2%	5,929
Crawford County	23,400	97.2%	140	0.6%	365	1.5%	123	0.5%	48	0.2%	24,076
Dunklin County	27,073	85.6%	2,993	9.5%	1,355	4.3%	108	0.3%	94	0.3%	31,623
Iron County	9,634	96.2%	229	2.3%	89	0.9%	46	0.5%	15	0.1%	10,013
Madison County	11,939	98.0%	51	0.4%	114	0.9%	31	0.3%	45	0.4%	12,180
Mississippi County	10,520	76.9%	2,839	20.8%	190	1.4%	43	0.3%	80	0.6%	13,672
New Madrid County	14,756	83.0%	2,744	15.4%	205	1.2%	34	0.2%	40	0.2%	17,779
Pemiscot County	13,447	71.6%	4,815	25.6%	386	2.1%	51	0.3%	81	0.4%	18,780
Perry County	18,250	97.1%	106	0.6%	227	1.2%	51	0.3%	160	0.9%	18,794
Reynolds County	6,257	96.8%	37	0.6%	53	0.8%	102	1.6%	16	0.2%	6,465
Ripley County	13,065	96.4%	49	0.4%	180	1.3%	201	1.5%	56	0.4%	13,551
Scott County	35,119	86.2%	4,774	11.7%	569	1.4%	118	0.3%	155	0.4%	40,735
St. Francois County	59,244	94.3%	2,212	3.5%	704	1.1%	299	0.5%	351	0.6%	62,810
Ste. Genevieve County	17,312	97.0%	261	1.5%	182	1.0%	51	0.3%	35	0.2%	17,841
Stoddard County	28,775	96.8%	432	1.5%	326	1.1%	133	0.4%	72	0.2%	29,738
Washington County	23,164	95.3%	689	2.8%	242	1.0%	171	0.7%	51	0.2%	24,317
Wayne County	12,361	97.7%	68	0.5%	95	0.8%	106	0.8%	25	0.2%	12,655
Region Total	445,861	91.5%	29,378	6.0%	6,907	1.4%	2,461	0.5%	2,535	0.5%	487,142

**Figure 1. HIV disease cases (living and deceased), by current HIV vs. AIDS status, Southeast HIV Region, 1982—2008**



**Figure 2. Living and new HIV disease cases and deaths by year\*, Southeast HIV Region, 1999—2008**

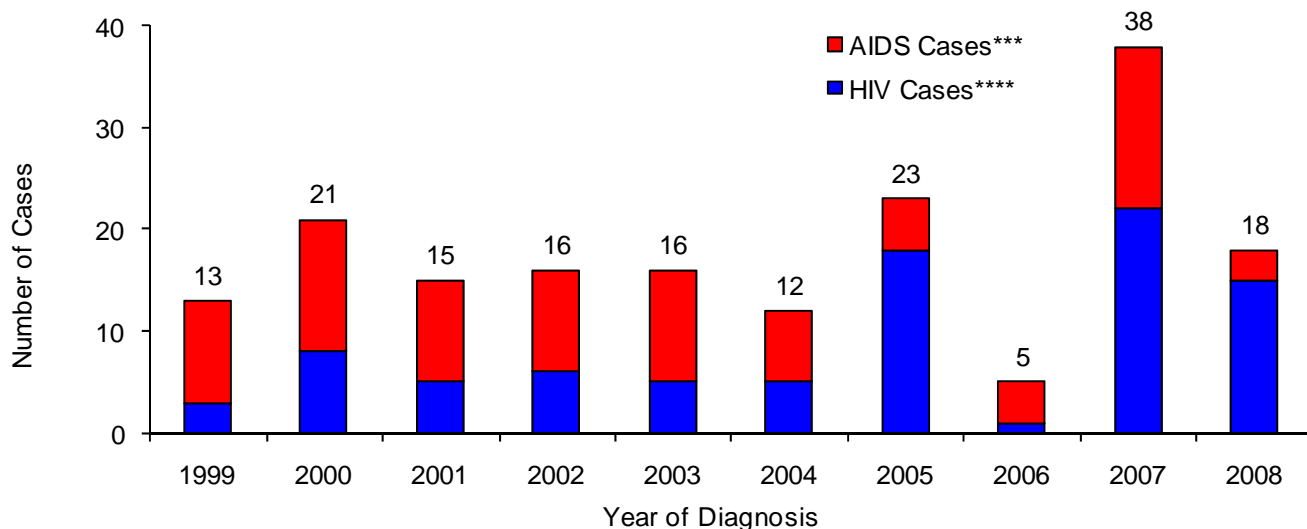


\*For living HIV disease cases-the number of individuals living with HIV disease at the end of the year; For new HIV disease cases-the number of individuals newly diagnosed in the year; For HIV disease deaths-the number of individuals that died in the year.

From 1982 to 2008, there have been a total of 486 HIV disease cases diagnosed in the Southeast HIV region and reported to MDHSS (Figure 1). Of the cumulative cases reported, 64% were still presumed to be living with HIV disease at the end of 2008. Among those living with HIV disease, 148 were classified as HIV cases at the end of 2008 and 165 were classified as AIDS cases.

At the end of 2008, there were 313 persons living with HIV disease whose most recent diagnosis occurred in the Southeast HIV region (Figure 2). The number of people living with HIV disease increased over time. There were 18 new HIV disease diagnoses in 2008. The number of new diagnoses has fluctuated from 2005 to 2008. A new testing initiative implemented in 2007 may be one reason for the greater number of HIV disease diagnoses in 2007. The number of deaths among persons with HIV disease has remained generally stable.

**Figure 3. HIV disease cases, by current status\* and year of diagnosis\*\*, Southeast HIV Region, 1999—2008**



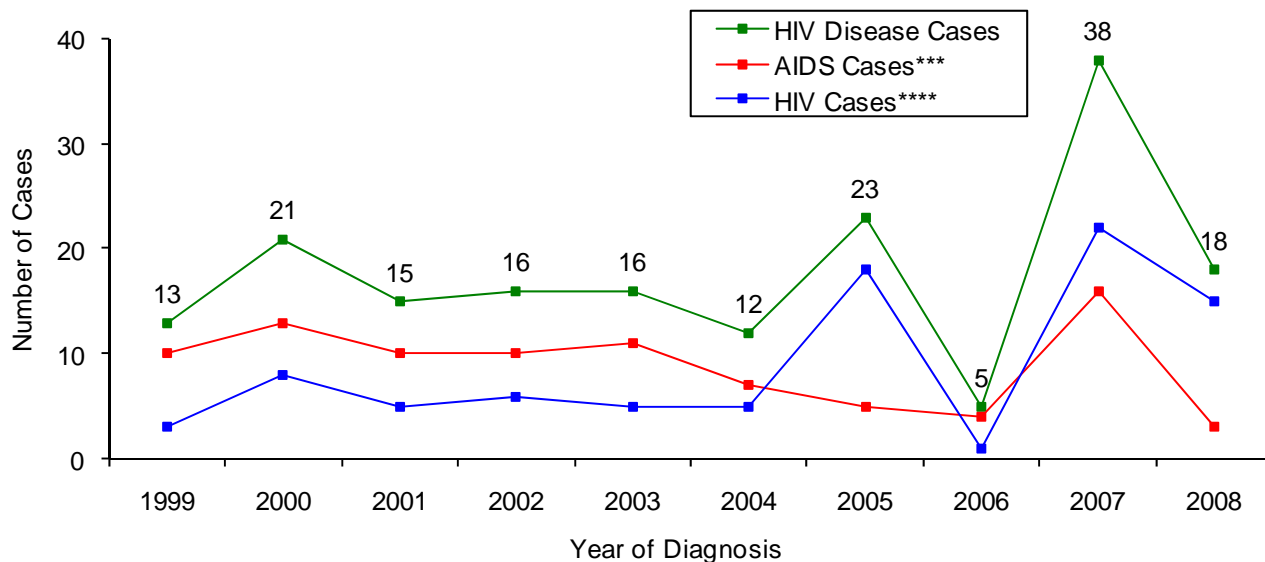
\*HIV case vs. AIDS case

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

**Figure 4. Reported HIV disease cases, by current status\* and year of diagnosis\*\*, Southeast HIV Region, 1999—2008**



\*HIV case vs. AIDS case

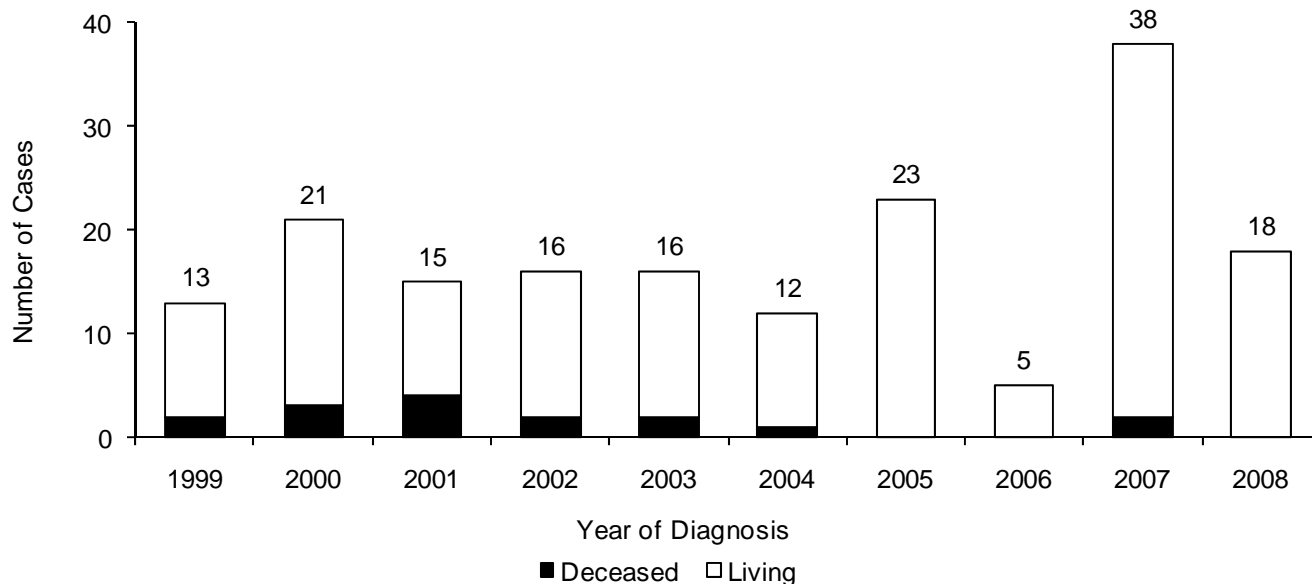
\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

\*\*\*These cases were either: 1) initially reported as HIV cases and then later reclassified as AIDS cases because they subsequently met the AIDS case definition; or 2) initially reported as AIDS cases.

\*\*\*\*These cases were initially reported as HIV cases and have remained HIV cases. They have not met the case definition for AIDS as of December 31, 2008.

The number of new diagnoses has fluctuated between 2005 and 2008 in the Southeast region (Figures 3 and 4). A new testing initiative implemented in 2007 may be one reason for the greater number of HIV disease diagnoses in 2007. Differences in the number of persons sub-classified as AIDS cases each year are due to the progression of the disease over time.

**Figure 5. Persons diagnosed with HIV disease by current vital status\* and year of diagnosis\*\*, Southeast HIV Region, 1999—2008**



\*Vital status on December 31, 2008.

\*\*Cases are indicated by year of initial diagnosis reported to MDHSS. (The year in which the first diagnosis of the person, whether as an HIV case or an AIDS case, was documented by the Department).

Of the 13 persons diagnosed with HIV disease in 1999, two (15%) were deceased by the end of 2008 (Figure 5). Among the 18 persons first diagnosed in 2008, none were deceased at the end of 2008. The difference in the proportion of cases that are deceased is due to the length of time individuals have been living with the disease. Among persons diagnosed in 2005, 2006, and 2008 no deaths have been reported to MDHSS.

**Table 1. Living<sup>†</sup> HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and by current age, Southeast HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	Cases	%	Rate****	Cases	%	Rate****	Cases	%	Rate****
<b>Sex</b>									
Male	111	75.0%	46.3	116	70.3%	48.4	227	72.5%	94.7
Female	37	25.0%	14.9	49	29.7%	19.8	86	27.5%	34.7
Total	148	100.0%	30.4	165	100.0%	33.9	313	100.0%	64.3
<b>Race/Ethnicity</b>									
White	97	65.5%	21.8	121	73.3%	27.1	218	69.6%	48.9
Black	46	31.1%	156.6	41	24.8%	139.6	87	27.8%	296.1
Hispanic	4	2.7%	57.9	2	1.2%	29.0	6	1.9%	86.9
Asian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown	1	0.7%	N/A	1	0.6%	N/A	2	0.6%	N/A
Total	148	100.0%	30.4	165	100.0%	33.9	313	100.0%	64.3
<b>Race/Ethnicity-Males</b>									
White Male	77	69.4%	35.3	96	82.8%	43.9	173	76.2%	79.2
Black Male	30	27.0%	202.4	17	14.7%	114.7	47	20.7%	317.1
Hispanic Male	3	2.7%	79.3	2	1.7%	52.8	5	2.2%	132.1
Asian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Male	1	0.9%	N/A	1	0.9%	N/A	2	0.9%	N/A
Total	111	100.0%	46.3	116	100.0%	48.4	227	100.0%	94.7
<b>Race/Ethnicity-Females</b>									
White Female	20	54.1%	8.8	25	51.0%	11.0	45	52.3%	19.8
Black Female	16	43.2%	109.9	24	49.0%	164.9	40	46.5%	274.8
Hispanic Female	1	2.7%	32.0	0	0.0%	0.0	1	1.2%	32.0
Asian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	37	100.0%	14.9	49	100.0%	19.8	86	100.0%	34.7
<b>Current Age<sup>‡</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	2	1.4%	2.9	0	0.0%	0.0	2	0.6%	2.9
13-18	1	0.7%	2.5	1	0.6%	2.5	2	0.6%	5.0
19-24	10	6.8%	27.6	2	1.2%	5.5	12	3.8%	33.1
25-44	85	57.4%	64.9	76	46.1%	58.0	161	51.4%	122.8
45-64	45	30.4%	36.5	84	50.9%	68.1	129	41.2%	104.6
65+	5	3.4%	6.7	2	1.2%	2.7	7	2.2%	9.3
Total	148	100.0%	30.4	165	100.0%	33.9	313	100.0%	64.3

<sup>†</sup>Includes persons diagnosed with HIV disease in the Southeast HIV Region who are currently living, regardless of current residence.

\*Cases which remained HIV cases at the end of 2008.

\*\*Cases classified as AIDS by December 31, 2008.

\*\*\*The sum of HIV cases and AIDS cases.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

<sup>‡</sup>Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

**Table 2. Diagnosed HIV, AIDS, and HIV disease cases, by sex, by race/ethnicity, by race/ethnicity and sex, and current age, Southeast HIV Region, 2008**

	<b>HIV*</b>			<b>AIDS**</b>			<b>HIV Disease***</b>		
	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>	<u>Cases</u>	<u>%</u>	<u>Rate****</u>
<b>Sex</b>									
Male	14	93.3%	5.8	2	66.7%	0.8	16	88.9%	6.7
Female	1	6.7%	0.4	1	33.3%	0.4	2	11.1%	0.8
Total	15	100.0%	3.1	3	100.0%	0.6	18	100.0%	3.7
<b>Race/Ethnicity</b>									
White	11	73.3%	2.5	1	33.3%	0.2	12	66.7%	2.7
Black	4	26.7%	13.6	2	66.7%	6.8	6	33.3%	20.4
Hispanic	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	15	100.0%	3.1	3	100.0%	0.6	18	100.0%	3.7
<b>Race/Ethnicity-Males</b>									
White Male	11	78.6%	5.0	1	50.0%	0.5	12	75.0%	5.5
Black Male	3	21.4%	20.2	1	50.0%	6.7	4	25.0%	27.0
Hispanic Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Male	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Male	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	14	100.0%	5.8	2	100.0%	0.8	16	100.0%	6.7
<b>Race/Ethnicity-Females</b>									
White Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Black Female	1	100.0%	6.9	1	100.0%	6.9	2	100.0%	13.7
Hispanic Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Asian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
American Indian Female	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Other/Unknown Female	0	0.0%	N/A	0	0.0%	N/A	0	0.0%	N/A
Total	1	100.0%	0.4	1	100.0%	0.4	2	100.0%	0.8
<b>Current Age<sup>†</sup></b>									
<2	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
2-12	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
13-18	0	0.0%	0.0	1	33.3%	2.5	1	5.6%	2.5
19-24	4	26.7%	11.0	0	0.0%	0.0	4	22.2%	11.0
25-44	7	46.7%	5.3	1	33.3%	0.8	8	44.4%	6.1
45-64	4	26.7%	3.2	1	33.3%	0.8	5	27.8%	4.1
65+	0	0.0%	0.0	0	0.0%	0.0	0	0.0%	0.0
Total	15	100.0%	3.1	3	100.0%	0.6	18	100.0%	3.7

\*HIV cases diagnosed during 2008 which remained HIV cases at the end of the year.

\*\*AIDS cases initially diagnosed in 2008.

\*\*\*The sum of newly diagnosed HIV cases and newly diagnosed AIDS cases. Does not include cases diagnosed prior to 2008 with HIV, which progressed to AIDS in 2008.

\*\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

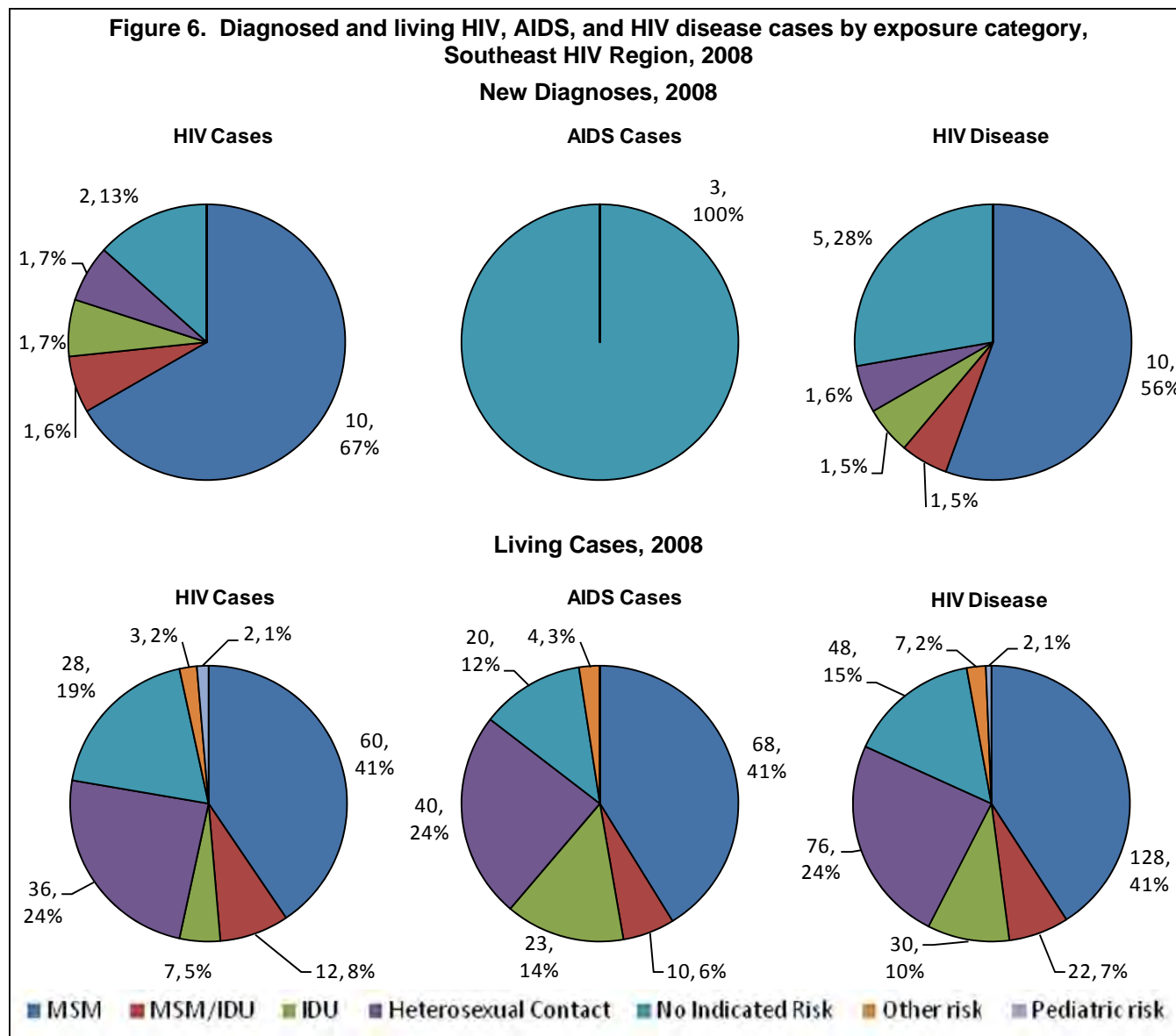
†Based on age as of December 31, 2008.

Note: Percentages may not total due to rounding.

## Epi Profiles Summary: Southeast HIV Region

Of the 313 persons living with HIV at the end of 2008, 73% were males (Table 1). The rate of those living with HIV disease was 2.7 times greater among males than females. The difference in the rates between males and females was smaller than that observed in Missouri overall. Although whites represented the largest proportion of living HIV disease cases (70%), the rate of those living with HIV disease was 6.1 times greater among blacks than whites. The rate was 1.8 times greater among Hispanics than whites. However, the difference should be interpreted with caution because of the small number of Hispanics living with HIV disease. Among males, the rate of living cases was 4.0 times greater for blacks than whites. Among females, the rate of those living with HIV disease was 13.8 times greater among blacks than whites.

Of the 18 persons newly diagnosed with HIV disease in 2008, 17% were classified as AIDS cases by the end of 2008 (Table 2). Males represented 89% of new diagnoses. Whites represented the majority of new HIV disease diagnoses (67%).



Among all categories, except new AIDS cases, the largest proportion of cases were attributed to MSM (Figure 6). The large proportion of cases with no indicated risk made trends difficult to interpret for all categories. The surveillance program examined methods to improve the identification and reporting of exposure category information.

**Table 3. New and living HIV and AIDS cases and rates, by geographic area, Southeast HIV Region, 2008**

Geographic Area	HIV Cases						AIDS Cases					
	Diagnosed 2008*			Living			Diagnosed 2008**			Living		
	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***	Cases	%	Rate***
Cape Girardeau County	1	6.7%	1.4	26	17.6%	35.7	0	0.0%	0.0	24	14.5%	33.0
Scott County	1	6.7%	2.5	18	12.2%	44.2	0	0.0%	0.0	10	6.1%	24.5
St. Francois County	2	13.3%	3.2	19	12.8%	30.2	0	0.0%	0.0	27	16.4%	43.0
Pemiscot County	0	0.0%	0.0	16	10.8%	85.2	0	0.0%	0.0	7	4.2%	37.3
Dunklin County	0	0.0%	0.0	8	5.4%	25.3	0	0.0%	0.0	21	12.7%	66.4
Butler County	1	6.7%	2.4	11	7.4%	26.6	1	33.3%	2.4	15	9.1%	36.3
Remainder of Region	10	66.7%	4.6	50	33.8%	22.8	2	66.7%	0.9	61	37.0%	27.8
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>15</b>	<b>100.0%</b>	<b>3.1</b>	<b>148</b>	<b>100.0%</b>	<b>30.4</b>	<b>3</b>	<b>100.0%</b>	<b>0.6</b>	<b>165</b>	<b>100.0%</b>	<b>33.9</b>

\*HIV cases diagnosed and reported to the Department during 2008 which remained HIV cases at the end of the year.

\*\*Does not include HIV cases that progressed to AIDS.

\*\*\*Per 100,000 population based on 2007 MDHSS estimates.

Note: Percentages may not total due to rounding.

Although the number of living HIV cases was greatest in Cape Girardeau County, the rate of individuals living with HIV was greatest in Pemiscot County (Table 3). Among living AIDS cases, the largest numbers were residents of St. Francois County at the time of their AIDS diagnosis. However, the rate of individuals living with AIDS was highest in Dunklin County.

**Table 4. Newly diagnosed and living HIV and AIDS cases in men who have sex with men, by selected race/ethnicity, Southeast HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	8	80.0%	47	78.3%	0	--	59	86.8%
Black	2	20.0%	11	18.3%	0	--	7	10.3%
Hispanic	0	0.0%	2	3.3%	0	--	1	1.5%
Other/Unknown	0	0.0%	0	0.0%	0	--	1	1.5%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>10</b>	<b>100.0%</b>	<b>60</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>68</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 5. Living HIV disease cases in men who have sex with men, by selected race/ethnicity, by current age group, Southeast HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	1	0.9%	4	22.2%	1	33.3%	6	4.7%
25-44	61	57.5%	11	61.1%	2	66.7%	74	57.8%
45-64	43	40.6%	3	16.7%	0	0.0%	47	36.7%
65+	1	0.9%	0	0.0%	0	0.0%	1	0.8%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>106</b>	<b>100.0%</b>	<b>18</b>	<b>100.0%</b>	<b>3</b>	<b>100.0%</b>	<b>128</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 6. Living HIV disease cases in men who have sex with men, by geographic area, Southeast HIV Region, 2008**

Geographic Area	Cases	%
Cape Girardeau County	31	24.2%
Scott County	9	7.0%
St. Francois County	23	18.0%
Pemiscot County	8	6.3%
Dunklin County	7	5.5%
Butler County	11	8.6%
Remaining Counties	39	30.5%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>128</b>	<b>100.0%</b>

There were 10 new HIV disease diagnoses attributed to men who have sex with men (MSM) in 2008 for the Southeast HIV region (Table 4). All new diagnoses remained sub-classified as HIV cases at the end of 2008. Whites represented the greatest proportion of new HIV diagnoses. There were 128 living HIV disease cases attributed to MSM in the Southeast HIV region. Whites represented a greater proportion among living AIDS cases compared to living HIV cases.

The distribution of living HIV disease cases by current age varied by race/ethnicity among MSM (Table 5). Greater proportions of black and Hispanic MSM living with HIV disease were 19-24 years of age at the end of 2008 compared to whites in the Southeast HIV region. The distribution by current age for Hispanics should be interpreted with some caution due to the small number of cases.

The largest numbers of living HIV disease cases attributed to MSM were residents of Cape Girardeau County at the time of their most recent diagnosis (Table 6). The second largest number of living cases among MSM resided in St. Francois County.

**Table 7. Newly diagnosed and living HIV and AIDS cases in men who have sex with men and inject drugs, by selected race/ethnicity, Southeast HIV Region, 2008**

Race/Ethnicity	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White	1	100.0%	12	100.0%	0	--	8	80.0%
Black	0	0.0%	0	0.0%	0	--	2	20.0%
Hispanic	0	0.0%	0	0.0%	0	--	0	0.0%
Other/Unknown	0	0.0%	0	0.0%	0	--	0	0.0%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>1</b>	<b>100.0%</b>	<b>12</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>10</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

Note: Percentages may not total due to rounding.

**Table 8. Living HIV disease cases in men who have sex with men and inject drugs, by selected race/ethnicity, by current age group, Southeast HIV Region, 2008**

Age Group	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	--	0	0.0%
19-24	1	5.0%	0	0.0%	0	--	1	4.5%
25-44	9	45.0%	1	50.0%	0	--	10	45.5%
45-64	10	50.0%	1	50.0%	0	--	11	50.0%
65+	0	0.0%	0	0.0%	0	--	0	0.0%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>20</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>22</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 9. Living HIV disease cases in men who have sex with men and inject drugs, by geographic area, Southeast HIV Region, 2008**

Geographic Area	Cases	%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>22</b>	<b>100.0%</b>

There was one new HIV disease diagnosis attributed to men who have sex with men and inject drugs (MSM/IDU) in 2008 for the Southeast HIV region (Table 7). The person remained sub-classified as HIV at the end of 2008. There were 22 MSM/IDU living with HIV disease at the end of 2008 whose most recent diagnosis occurred in the Southeast HIV region. The largest proportion of both living HIV and AIDS cases was white.

Among white MSM/IDU living with HIV disease, the number of cases was nearly evenly split between individuals 25-44 and 45-64 years old at the end of 2008 (Table 8). Among the two black MSM/IDU living with HIV disease, one was between 25-44 and the other was between 45-64 years of age at the end of 2008.

**Table 10. Newly diagnosed and living HIV and AIDS cases in injecting drug users, by selected race/ethnicity and sex, Southeast HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	100.0%	4	57.1%	0	--	12	52.2%
Black Male	0	0.0%	0	0.0%	0	--	2	8.7%
Hispanic Male	0	0.0%	0	0.0%	0	--	1	4.3%
White Female	0	0.0%	1	14.3%	0	--	5	21.7%
Black Female	0	0.0%	2	28.6%	0	--	3	13.0%
Hispanic Female	0	0.0%	0	0.0%	0	--	0	0.0%
<b>SOUTHEAST HIV REGION TOTAL<sup>†</sup></b>	<b>1</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>23</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

<sup>†</sup>Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 11. Living HIV disease cases in injecting drug users, by selected race/ethnicity, by current age group, Southeast HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
25-44	6	37.5%	0	0.0%	1	16.7%	4	80.0%	12	40.0%
45-64	10	62.5%	2	100.0%	5	83.3%	1	20.0%	18	60.0%
65+	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>16</b>	<b>100.0%</b>	<b>2</b>	<b>100.0%</b>	<b>6</b>	<b>100.0%</b>	<b>5</b>	<b>100.0%</b>	<b>30</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 12. Living HIV disease cases in injecting drug users, by geographic area, Southeast HIV Region, 2008**

Geographic Area	Cases	%
Dunklin County	6	20.0%
St. Francois County	6	20.0%
Remaining Counties	18	60.0%
<b>SOUTHEAST HIV REGION</b>	<b>30</b>	<b>100.0%</b>

There was one new HIV disease diagnosis attributed to injecting drug users (IDU) in 2008 for the Southeast HIV region (Table 10). The case remained sub-classified as HIV at the end of 2008. There were 30 living HIV disease cases attributed to IDU at the end of 2008 in the Southeast HIV region. Of the IDU living with HIV disease, 77% were classified as AIDS at the end of 2008. White males represented the largest proportion of living HIV and AIDS cases.

Overall, the largest numbers of living HIV disease cases among IDU in the Southeast HIV region were between 45-64 years of age at the end of 2008 (18) (Table 11). Among black females, the largest numbers of individuals were between 25-44 years of age at the end of 2008. For all other race/ethnicity and sex categories presented, the largest numbers of persons were between 45-64 years of age.

Dunklin County and St. Francois County had the largest number of living HIV disease cases attributed to IDU in 2008 (Table 12).

**Table 13. Newly diagnosed and living HIV and AIDS cases in heterosexual contacts, by selected race/ethnicity and sex, Southeast HIV Region, 2008**

Race/Ethnicity and Sex	HIV Cases*				AIDS Cases			
	Newly Diagnosed		Living		Newly Diagnosed**		Living	
	Cases	%	Cases	%	Cases	%	Cases	%
White Male	1	100.0%	6	16.7%	0	--	5	12.5%
Black Male	0	0.0%	10	27.8%	0	--	4	10.0%
Hispanic Male	0	0.0%	0	0.0%	0	--	0	0.0%
White Female	0	0.0%	13	36.1%	0	--	14	35.0%
Black Female	0	0.0%	6	16.7%	0	--	17	42.5%
Hispanic Female	0	0.0%	1	2.8%	0	--	0	0.0%
<b>SOUTHEAST HIV REGION TOTAL<sup>†</sup></b>	<b>1</b>	<b>100.0%</b>	<b>36</b>	<b>100.0%</b>	<b>0</b>	<b>--</b>	<b>40</b>	<b>100.0%</b>

\*Remained HIV cases at the end of the year.

\*\*Does not include HIV cases diagnosed prior to 2008 that progressed to AIDS in 2008.

†Includes persons whose race/ethnicity is either unknown or not listed.

Note: Percentages may not total due to rounding.

**Table 14. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity and sex, by current age group, Southeast HIV Region, 2008**

Age Group	White Males		Black Males		White Females		Black Females		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%**	Cases	%**
13-18	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
19-24	0	0.0%	0	0.0%	1	3.7%	0	0.0%	1	1.3%
25-44	3	27.3%	9	64.3%	12	44.4%	17	73.9%	42	55.3%
45-64	5	45.5%	5	35.7%	14	51.9%	5	21.7%	29	38.2%
65+	3	27.3%	0	0.0%	0	0.0%	1	4.3%	4	5.3%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>11</b>	<b>100.0%</b>	<b>14</b>	<b>100.0%</b>	<b>27</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	<b>76</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of cases per age group.

Note: Percentages may not total due to rounding.

**Table 15. Living HIV disease cases in heterosexual contacts, by selected race/ethnicity, by geographic area, Southeast HIV Region, 2008**

Geographic Area	White		Black		Hispanic		Total*	
	Cases	%**	Cases	%**	Cases	%**	Cases	%***
Butler County	5	55.6%	4	44.4%	0	0.0%	9	11.8%
Scott County	4	50.0%	4	50.0%	0	0.0%	8	10.5%
Cape Girardeau County	1	20.0%	4	80.0%	0	0.0%	5	6.6%
Dunklin County	3	42.9%	4	57.1%	0	0.0%	7	9.2%
St. Francois County	4	80.0%	1	20.0%	0	0.0%	5	6.6%
Pemiscot County	1	16.7%	5	83.3%	0	0.0%	6	7.9%
Remaining Counties	20	55.6%	15	41.7%	1	2.8%	36	47.4%
<b>SOUTHEAST HIV REGION TOTAL</b>	<b>38</b>	<b>50.0%</b>	<b>37</b>	<b>48.7%</b>	<b>1</b>	<b>1.3%</b>	<b>76</b>	<b>100.0%</b>

\*Row totals and percentages include cases in persons whose race/ethnicity is either unknown or not listed.

\*\*Percentage of race in each area.

\*\*\*Percentage of cases per area.

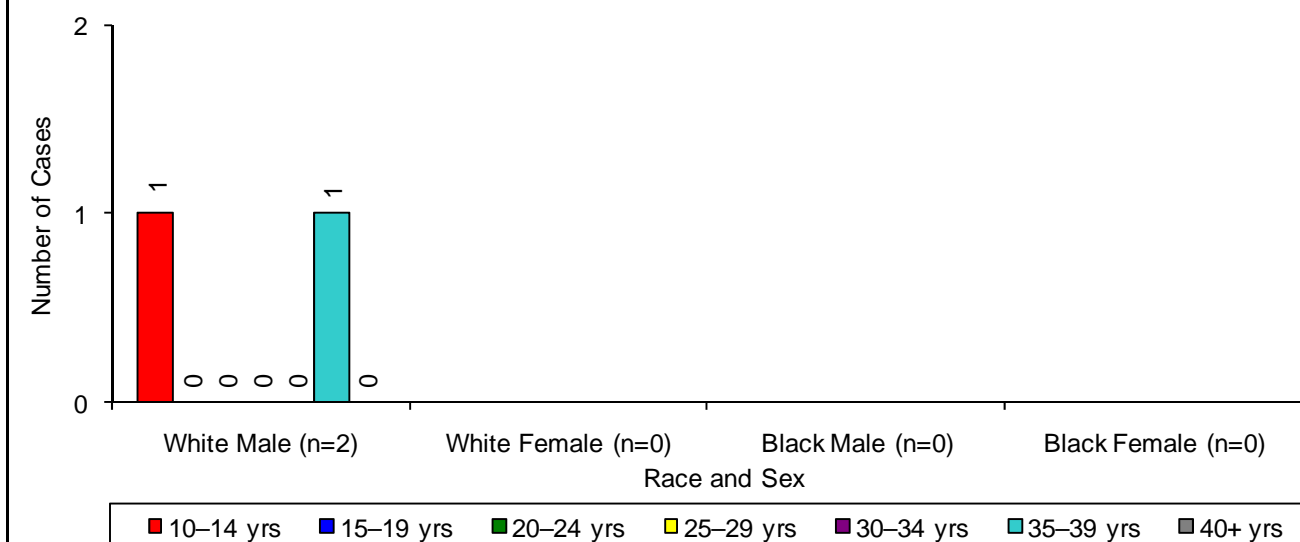
Note: Percentages may not total due to rounding.

There was one new HIV disease diagnosis attributed to heterosexual contact in 2008 for the Southeast HIV region (Table 13). Black females represented the largest proportion living AIDS cases, whereas white females represented the largest proportion of living HIV cases among heterosexual contact cases.

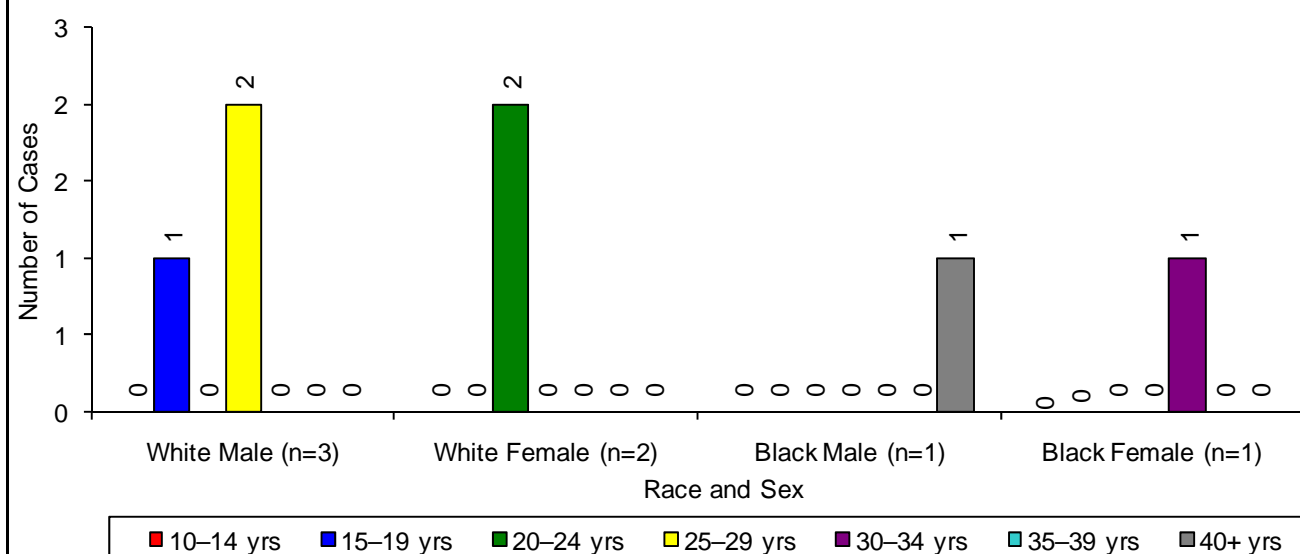
At the end of 2008, the majority of heterosexual contact cases living with HIV disease were between 25-44 years of age for black males and black females (Table 14). Those 45-64 years of age represented the largest proportion among white males and white females.

There were differences in the distribution of living cases by race/ethnicity among the geographic areas for heterosexual contact cases (Table 15). In Cape Girardeau County and Pemiscot County, black heterosexual contact cases comprised a larger proportion of living cases compared to other areas.

**Figure 7. Reported P&S syphilis cases, by race and sex, by age group at diagnosis, Southeast Region, 2008**

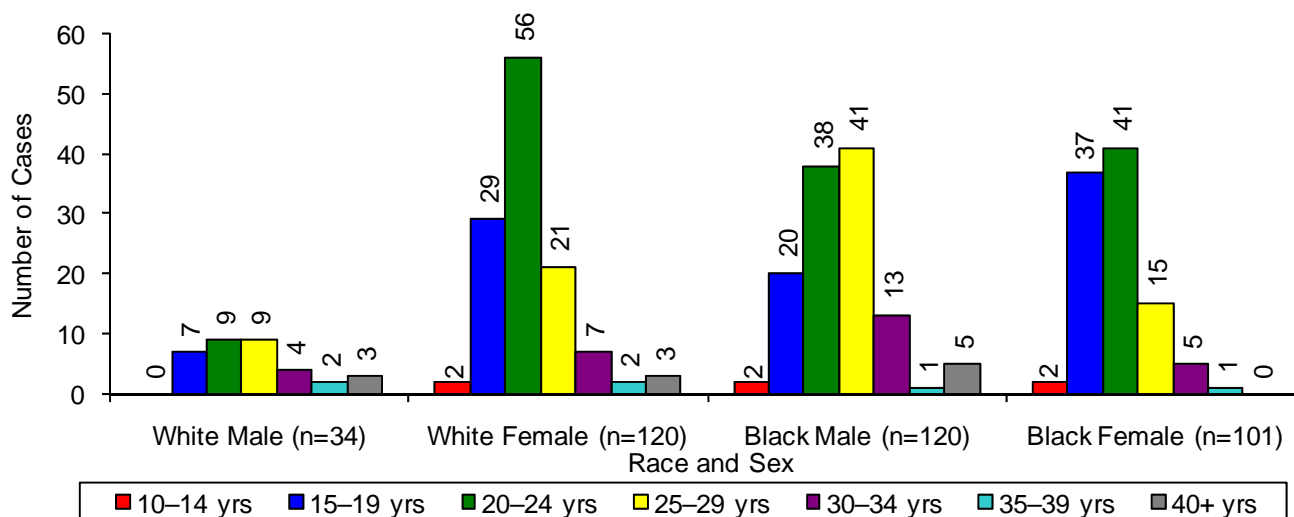


**Figure 8. Reported early latent syphilis cases, by race and sex, by age group at diagnosis, Southeast Region, 2008**

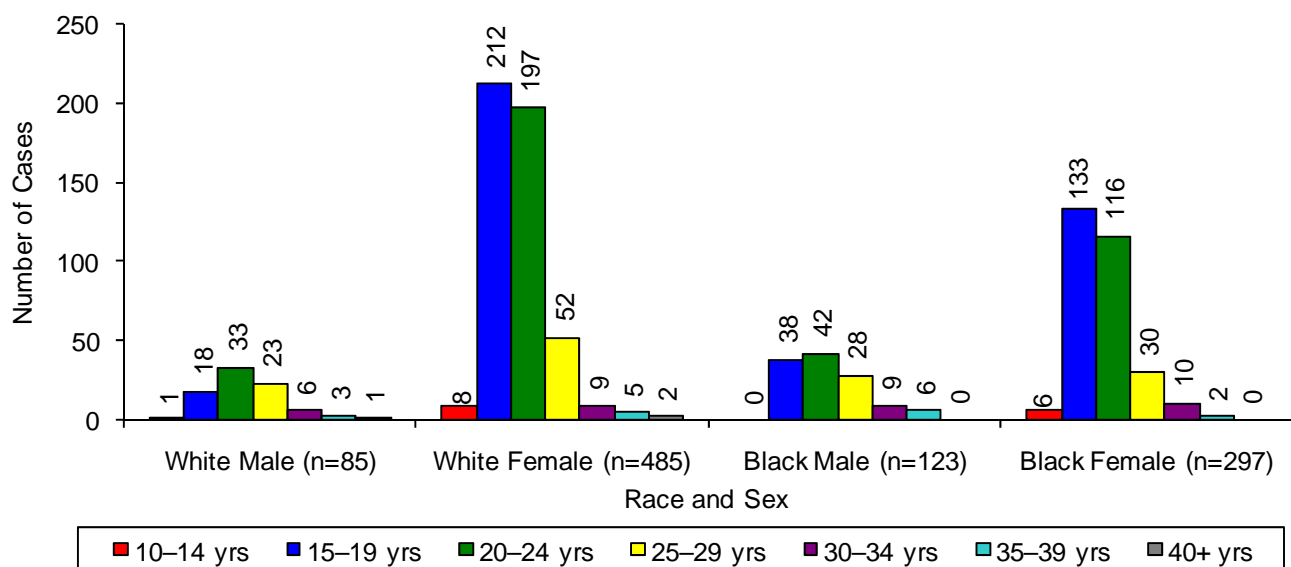


In the Southeast region, P&S syphilis cases were only reported among white males (2) (Figure 7). The number of reported cases increased from 2007 to 2008 among white males (1 to 2) and decreased among black females (1 to 0).

The largest number of early latent syphilis cases was reported among white males (3) (Figure 8). The number of reported early latent syphilis cases increased from 2007 to 2008 among white males (1 to 3), white females (0 to 2), and black females (0 to 1). The number of reported cases decreased from 2007 to 2008 among black males (3 to 1).

**Figure 9. Reported gonorrhea cases, by race and sex, by age group at diagnosis, Southeast Region, 2008**

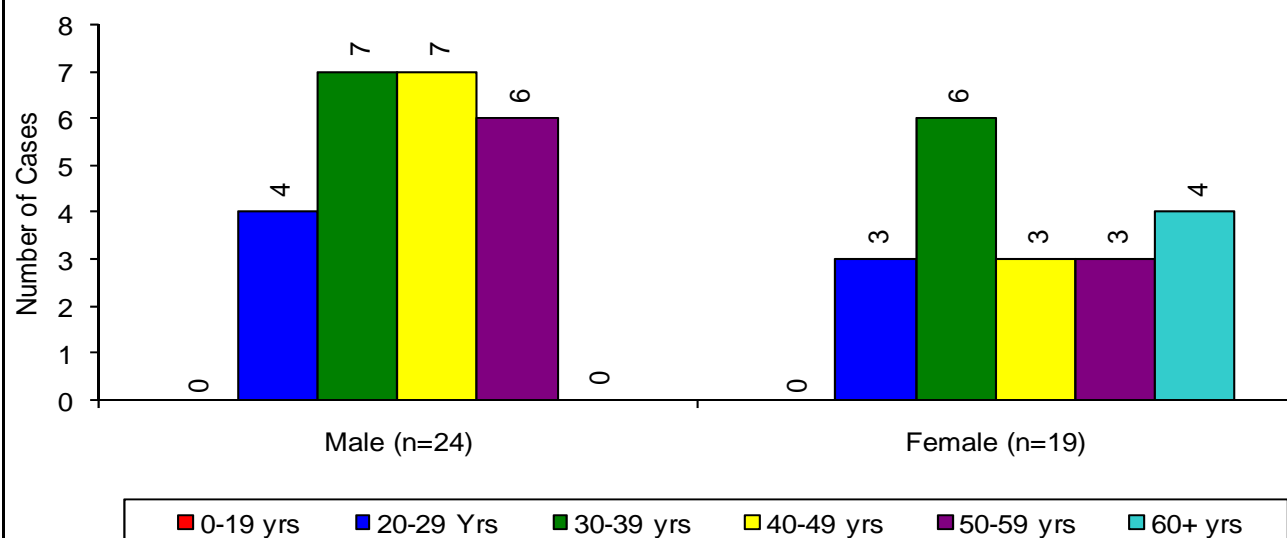
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

**Figure 10. Reported chlamydia cases, by race and sex, by age group at diagnosis, Southeast Region, 2008**

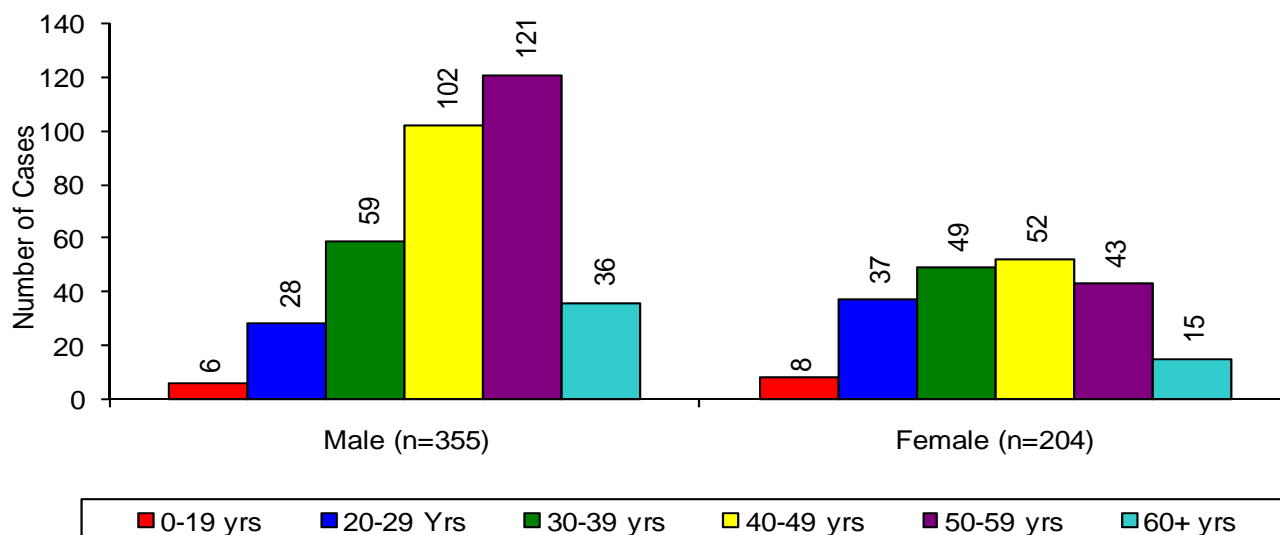
Note: Totals include persons diagnosed at <10 years of age or whose age at diagnosis is unknown.

The largest number of gonorrhea cases was reported among white females (120) and black males (120) (Figure 9). The number of reported cases increased from 2007 to 2008 among all race/ethnicity and sex categories presented. This was opposite of the trend seen in Missouri overall, where the number of reported cases decreased among categories presented from 2007 to 2008. Among white and black females, the largest numbers of cases were diagnosed between 20-24 years of age. Among black males, the largest numbers of cases were diagnosed between 25-29 years of age. Equal numbers of cases were diagnosed between 20-24 and 25-29 years of age among white males.

The largest number of chlamydia cases was reported among white females (485) followed by black females (297). The number of reported chlamydia cases increased from 2007 to 2008 among black females (264 to 297), but decreased among all other race/ethnicity and sex categories presented. Among white and black females, individuals 15-19 years of age represented the largest number of reported cases. Among white and black males the largest numbers of reported cases were diagnosed between 20-24 years of age.

**Figure 11. Reported Hepatitis B cases, by sex and by age group at diagnosis, Southeast Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

**Figure 12. Reported Hepatitis C cases, by sex and by age group at diagnosis, Southeast Region, 2008**

Note: Totals include persons whose age at diagnosis is unknown.

There were 43 reported cases of Hepatitis B in the Southeast HIV region during 2008 (Figure 11). Females represented 44% of reported Hepatitis B cases, which was lower than the proportion of females cases reported in Missouri overall (53%). There were differences in the age distribution of reported Hepatitis B cases by sex. Among males, equal numbers of cases were diagnosed between 30-39 and 40-49 years old. Those 30-39 years old represented the largest proportion of female cases.

In 2008, there were 559 Hepatitis C cases reported in the Southeast HIV region (Figure 12). Of the reported Hepatitis C cases, 64% were male. There differences in the age at diagnosis of reported Hepatitis C cases by sex. A greater proportion of females was diagnosed at less than 50 years of age (72%) compared to males (56%).

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## Glossary

### AIDS case

This refers to an individual who has been infected with human immunodeficiency virus (HIV) that is in the later stages of the disease process and has met the case definition for AIDS.

### Case rate

The frequency of a defined event in a specified population for a given time period, usually expressed as the number of cases per 100,000 people in a population. Case rate is calculated by dividing the number of cases in the population of interest by the total number of people in the population. Then multiplying by 100,000 to get the rate per 100,000.

### Case definition for AIDS

All HIV-infected people who have fewer than 200 CD4<sup>+</sup> T cells per cubic millimeter of blood (healthy adults usually have 800 to 1,200, with 1,000 the average). In addition, the definition includes 26 clinical conditions that affect people with advanced HIV disease. Most of these conditions are opportunistic infections that generally do not affect healthy people.

### CD4+ T cells

This is a white blood cell with CD4 molecules on its surface. These cells play an important role in the human immune system. Sometimes referred to as “helper” cells, they orchestrate the body's response to certain microorganisms such as viruses. HIV virus particles attack and utilize these cells to multiply.

### Cumulative number of cases

The number of all cases diagnosed with a particular condition including living and deceased individuals in a specified area.

### Date of diagnosis

The date a laboratory makes a diagnosis based on the chemical analysis of a specimen.

### Epidemic

The “occurrence in a community or region of cases of an illness, specified health-related behavior, or other health-related events clearly in excess of normal expectancy.”

### Highly active antiretroviral therapy (HAART)

This is a treatment protocol using a combination of antiretroviral drugs to suppress the HIV virus. These drugs consist of four basic classes depending on their method of suppression: reverse transcriptase (RT) inhibitors, protease inhibitors (PI), fusion inhibitors, and integrase inhibitors.

### HIV case

It refer to an individual who has been infected with the human immunodeficiency virus (HIV) that is in the early stages of the disease process and has not met the case definition for AIDS.

### HIV disease case

This includes all individuals who have been infected with the human immunodeficiency virus (HIV). Cases can be sub-classified into either HIV cases or AIDS cases.

### Incidence

The number of new cases of a specified condition diagnosed within a given time. The calendar year is used in the *Profiles* to calculate incidence.

### Incidence rate

The number of new cases diagnosed in a specified population for a given time period, usually expressed as the number of cases per 100,000 people in a population. Incidence rate is calculated by dividing the number of new cases in the population of interest by the total number of people in that population. Then multiplying by 100,000 to get the rate per 100,000.

### Modes of transmission

Also referred to as **exposure categories**, this term refers to the way in which an individual acquired the HIV virus. The most common modes of transmission are: men who have sex with men (MSM), heterosexual contact,

## Epi Profiles Summary: Glossary

injection drug users (IDUs), men who have sex with men and practice injection drug use (MSM/IDUs), hemophilia/coagulation disorder, and blood transfusion or tissue recipients.

### **Point prevalence**

This refers to the number of persons living with a specified condition at a given point in time. December 31<sup>st</sup>, is used for the *Profiles* to calculate the number of persons living with HIV or AIDS for each year.

### **Prevalence rate**

The number of individuals living with the specified condition in a specified population for a given time period, usually expressed as the number of cases per 100,000 people in a population. A prevalence rate is calculated by dividing the number of living cases in the population of interest by the total number of people in that population. Then multiplying by 100,000 to get the rate per 100,000.

### **Sexually Transmitted Infections**

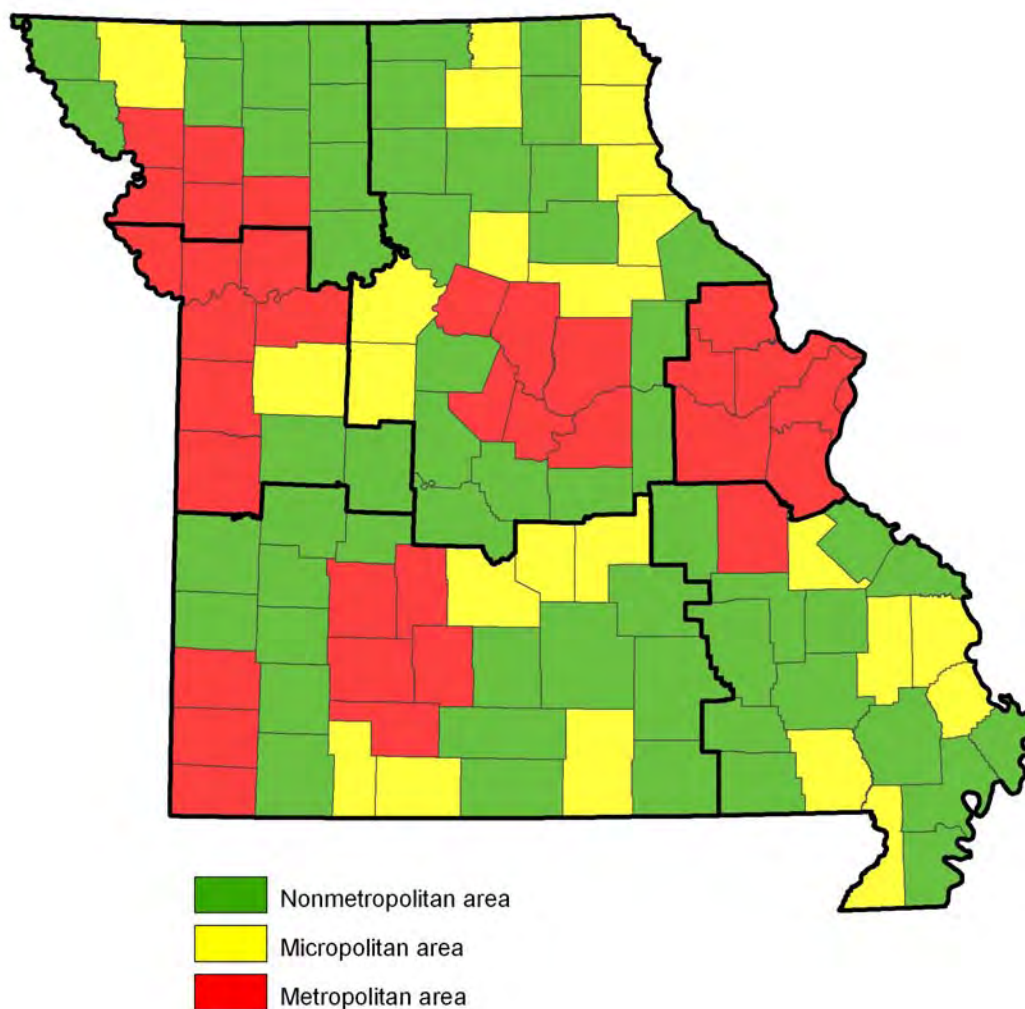
Sexually transmitted infections (STIs), commonly called **sexually transmitted diseases (STDs)** and once called venereal diseases, are among the most common infectious diseases in the United States today. They are a group of infections that are predominantly transmitted through sexual activity.

### **Sexually Transmitted Infections and the Organisms Responsible**

Disease	Organism(s)
Acquired Immunodeficiency Syndrome (AIDS)	Human immunodeficiency virus
Chlamydial infections	Chlamydia trachomatis
Gonorrhea	Neisseria gonorrhoeae
Syphilis	Treponema pallidum

## Appendix

### Metropolitan, micropolitan, and nonmetropolitan areas by county



Source: Missouri Census Data Center, MABLE/Geocorr2K. 2006 Metropolitan Divisions.